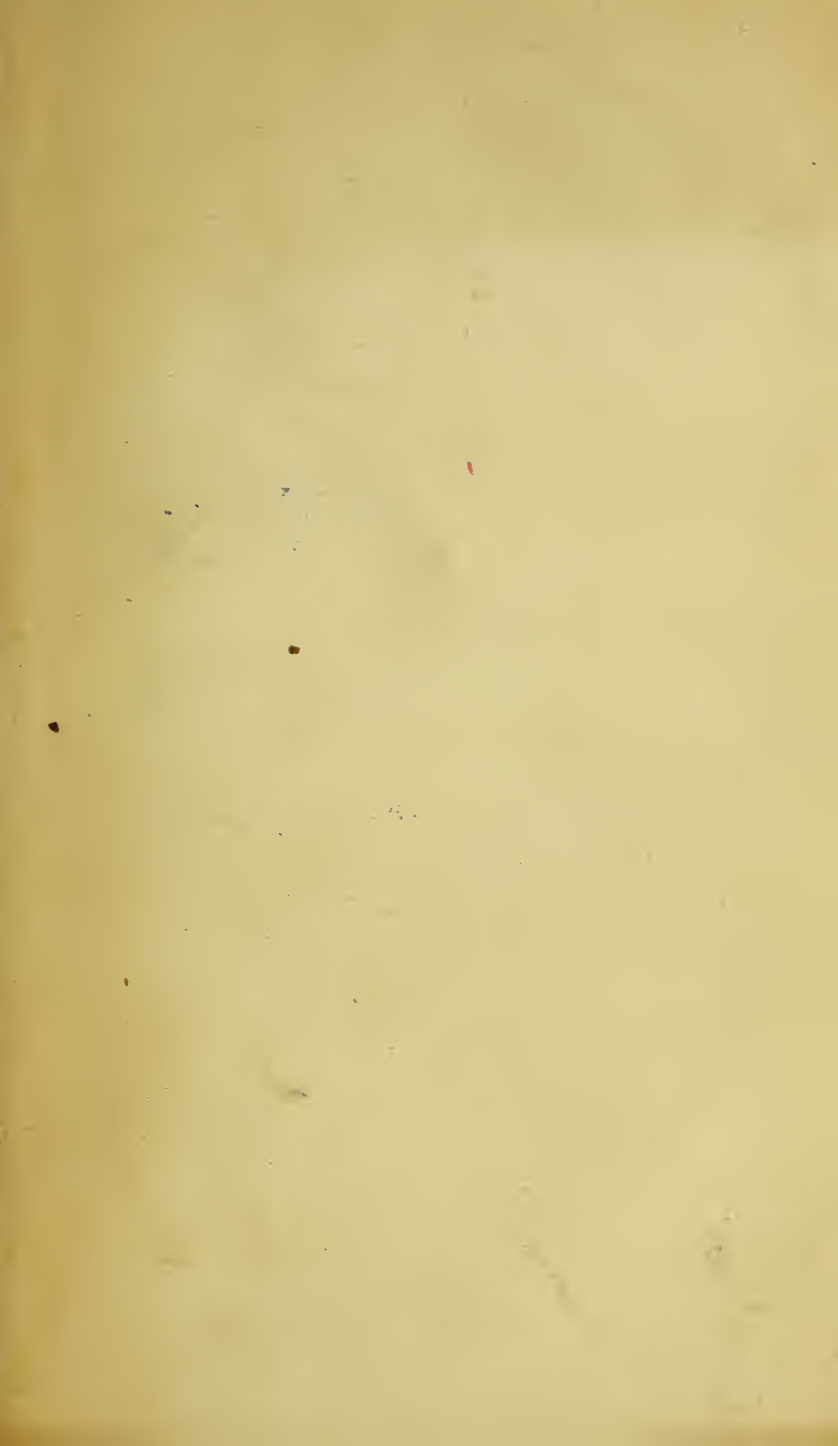


36
3
21

No. ~~1491~~ 21652 Department of 619.05 VE
LIBRARY OF Vol. 21
Illinois Industrial University,
CHAMPAIGN, ILL.
Books are not to be taken from the Library Room. 20

VETERINARY MEDICINE
LIBRARY



THE
VETERINARIAN;

OR,

MONTHLY JOURNAL OF VETERINARY SCIENCE,
FOR 1848.

VOL. XXI.—VOL. I. THIRD SERIES.

EDITED BY

MR. PERCIVALL,


IN COMMUNICATION WITH M. LEBLANC, EDITOR OF THE
“CLINIQUE VETERINAIRE,” AT PARIS.

Ars Veterinaria post medicinam secunda est.—Vegetius.

LONDON :

PRINTED BY COMPTON & RITCHIE, MIDDLE STREET, CLOTH FAIR.

PUBLISHED BY LONGMAN, BROWN, GREEN, AND LONGMANS,
PATERNOSTER ROW.



Digitized by the Internet Archive
in 2016 with funding from
University of Illinois Urbana-Champaign Alternates



THE

VETERINARIAN.

VOL. XXI,
No. 241.

JANUARY 1848.

Third Series,
No. 1.

EFFECTS OF CHLOROFORM ON THE HORSE.

THE conversation the other evening, after the Council meeting had broken up, turning on the probable effects of chloroform, it being just about the time that publicity was given to Professor Simpson's experiments, Mr. Goodwin, V. S. to the Queen, informed those present that he had a horse—lame from navicular-thritis—at the Royal Mews, which he would be happy to make the subject of any trial of the kind. Accordingly, a day was fixed, and Messrs. Wilkinson, A. Cherry, Henderson, and Percivall attended, to witness an experiment promising to be of an unusually interesting character.

The animal, a fine sleek-looking bay carriage horse, evidently lame, came snorting and prancing out of his stable, full of health and vigour, and was led at once into the riding school. Though naturally quiet and good tempered, still, from his present buoyancy of spirits, it required some courage on the part of the strangers present to approach him. Such being the case, it became a question how or in what manner the chloroform was to be applied, so that he might effectually inhale its vapour. After some *pro* and *con* observations and suggestions, it was determined to send for a common leathern muzzle, and to affix to such parts of it as were (when the muzzle was on the head) directly opposed to the nostrils, two pieces of sponge, each of sufficient magnitude to imbibe an ounce or more of liquid chloroform. This was done, and the muzzle so fitted up, put on. Every thing being adjusted about the head, chloroform liquid from a bottle was poured first upon one sponge, afterwards upon the other by Mr. Percivall, out of a bottle containing three ounces of the fluid, until about two-thirds of the entire quantity, an ounce upon each sponge, had disappeared. The operation of pouring being finished, the groom, who had hold of the cavesson, by which the animal for fear of accident had been secured,

with a view of rendering the inhalation more effective, of his own accord at this time pressed the muzzle upwards, and so forced the sponges against the nostrils, a compression which caused the liquid to drop out from below ; scarcely, however, had this been done twice, when the animal, who had that moment been manifesting some increased vivacity, all at once threw up his head, became vertiginous, staggered from side to side, and in a moment afterwards reared up, and, in convulsion, reeled backward from the middle of the school, where he had been standing, against the panelled side of it behind him, striking his head against the panels with a force truly tremendous, frightening every person around him. The groom, holding the rope of the cavesson, exerted himself to save the animal, and in his efforts, fortunately perhaps for the horse at the moment, hauled cavesson, and bridle, and muzzle together off the animal's head, the only hold remaining being the retention of the snaffle bit within the mouth, and that was owing to the clenching of the jaws. At this period the horse had the aspect of one momentarily struck with tetanus. There was the wild, senseless, ghastly stare ; the stiff outstretched limbs : the body remaining supported by its hind quarters against the boards. And now the animal was pricked about the neck and body with a pin, but evinced not the slightest feeling ; nor did even his lips exhibit more than a convulsive twitch when they were likewise punctured. His pupils were dilated. His pulse was distinct though weak at the jaw, and was not in the first instance accelerated, though it rose considerably afterwards. Not more than half a minute elapsed after the sponges were pressed against his nostrils before the animal shewed himself affected by the chloroform ; and in the next half minute he was in convulsions. In consequence of the muzzle having come off in the act of reeling, *total* insensibility did not continue longer than about a couple of minutes. From that time the pulse gradually but rapidly increased in frequency, quickly becoming 60, 80, 100, and 120 ; while all the time consciousness and sensibility were found returning, and along with it unnatural heat of skin over every part of the body. In about five minutes after sensibility had returned, the animal appeared and proved sufficiently recovered to have his bridle and cavesson adjusted, and to be walked slowly round the school. In half an hour afterwards he had returned to his stable, and was eating with his wonted appetite his noon feed ; nor did he appear aught the worse in any respect whatever from the experiment that had been practised on him. The chloroform liquid used, which proved of excellent pure and effective quality, was obtained from Mr. Hooper, chemist, Pall Mall East.

Application of Chloroform to Animals.

An interesting and most successful experiment with this beneficent agent was tried on a lame horse, belonging to Mr. Reid, Drem, East Lothian. Dr. Robertson and Mr. F. Imlach, from Edinburgh, Dr. Lorimer, from Haddington, and others were present. About two ounces of the chloroform were poured on a piece of flannel cloth, below which was a sponge, the whole being placed in a tin case, which was tied over the horse's nose, and surrounded with a flannel bag. In three minutes and a half the animal fell over, and in five minutes it was perfectly insensible. When in that condition, Mr. Cockburn, veterinary surgeon, Haddington, performed the usually painful operation of cutting the nerves of sensation in both of its fore feet. On cutting the second nerve the poor beast made a slight movement, shewing the chloroform was beginning to lose its effect; but a second application of another ounce allowed the other two remaining nerves to be cut without a quiver. In twenty-five minutes from the commencement the animal was again on its legs, now perfectly sound.

AN UNUSUAL KIND OF LAMENESS AND POLL-EVIL
CAUSED BY ENTOZOA.

By F. P. VINCENT, M.R.C.V.S., Devizes.

AN unusual kind of lameness having fallen under my observation, I take the liberty of detailing the case for the pages of THE VETERINARIAN. I must apologize for the somewhat decomposed state of the accompanying perforans tendon.

Aug. 20th, 1845.—Mr. S. Akerman, a large farmer of Patney, near this town, applied to me respecting the lameness of a grey colt, of the cart-horse breed, rising three years. It appeared to be a sprain of the flexor tendons, about two or three inches above the fetlock joint. As the colt was at grass in a water meadow in which there were many drains, it was considered likely to have been caused in crossing one of them. He was taken up, bled locally, physicked, &c. Some time subsequently the liquid blister was put on, and repeated two or three times at proper intervals, and the animal became free from lameness.

May 23d, 1846.—He had been put to work a few days, and again became lame; was rested again, and similar treatment to the foregoing was resorted to; and, subsequently, as the ailment still remained, he was fired: but it proved ineffectual. It was repeated with severity, and long-continued rest enjoined.

Sept. 20th.—Visited my patient and found him turned into a meadow quite lame, and the leg enlarged. He was, by my desire, again confined, and absolute rest for some months insisted upon.

Oct. 17th.—Saw the colt—free from lameness.

March 5th, 1847.—After this long interval I was requested to see the grey colt once more. The son of my employer informed me that his father, disliking to see the colt confined, shortly after I last saw him, as he seemed to go sound, had had him turned into a meadow, and that the lameness soon re-appeared. I believe he was then submitted to the inspection of a neighbouring farrier, as the shoulder bore marks much resembling those of the firing-iron lightly used. Be that as it may, I was told that he became so excessively lame that it was imperative to take him into a farm-yard; where I found him so dreadfully crippled as to be able to put his toe only to the ground, carefully avoiding the pressure upon the posterior parts of the leg which bringing the heel down must necessarily inflict. It was then arranged that the horse should be sent to my stables.

The leg had become much enlarged from often-renewed lameness. I discovered fluctuation and swelling midway between the knee and the fetlock. I introduced the lancet, and a considerable flow of fluid resembling discoloured synovia followed. It afforded relief for some days. I now first began to suspect that there was probably ulceration of the sheath, which a post-mortem examination fully verified. I now despaired of any remedy; but it occurred to me that unnerving might possibly be a fair experiment. I performed that operation immediately below the knee, removing two inches or more upon each side. The horse, afterwards, walked perfectly well. Previous to this I had purchased him, as he was ordered to be destroyed. I was solicitous to try the experiment, but it proved to be a costly affair.

During the time the incisions were healing, to my great mortification a large soft tumour formed upon the poll. It was freely laid open. A flow of glairy fluid resembling linseed oil ensued, accompanied by a great number of small flat bodies—together they would have filled a common egg-cup; they were quite white, compact—even tough, and so much alike—although not perfectly so—so like, in fact, the fluke-worm in shape, that I doubted whether they were not of that family. If they were the production, by disease, of any

of the tissues or fluids of the body, they were surprisingly uniform. The poll-evil was treated in the ordinary way, and after some weeks had elapsed the horse was lent to a farmer, who used him for his keep, and he informed me that he worked very well and was free from lameness. He had him about ten¹/₂ days. One shoulder was bruised by the collar, and a soft tumour formed, similar to that upon the poll. With an accumulation of evils¹/₂ like these, I found that the subject of my experiment was likely to be much "more plague than profit;" and with some reluctance, therefore, I had him destroyed. Upon examining the tumour upon the shoulder, it was found to contain the same linseed oil-like fluid, and a few of the same white bodies as were in that of the poll. Upon dissecting back the perforatus tendon some days after death and exposing the perforans, the latter exhibited disease of so peculiar a character that I attempted a coloured drawing of it. The tendon itself was, as you will observe, greatly thickened, and had lost much of its density. Upon cutting through its body, in its centre was a cavity containing ash-coloured pus; but the most striking object, and one of great curiosity, presented itself about three inches above the fetlock, in the *original seat of the lameness*. It resembled the hip, the fruit of the dog-rose, embedded in the tendon, slightly projecting, and covered by the enveloping membrane, giving to that membrane a bright red colour, made up, in part, of minute red bloodvessels visible enough to the eyesight. This bright colouring was circumscribed to a line, and principally contributed, together with a projecting roundness of form, to afford it the resemblance before alluded to. Below, there was a faint blush of redness extending downwards and over one-half of the tendon—the affected side; above, and on the other half, it was of its natural colour. Upon cutting into it, my surprise was much heightened in beholding another of the previously described white bodies emerge, accompanied with fluid. It was encased in a dense cyst, the interior of which was smooth and glistening; it was three-fourths of an inch in length. Situate beneath, and rather on one side of it, I found two others. Two or three inches below, upon the same side of the tendon, a soft protrusion was also seen. It was cut into, and found to form a canal of communication with the interior of the part before described, where these bodies were deposited. In the course of this canal the tendon was flabby to the touch. No opening could be discovered by which these parasites (for such, I am informed, they were) obtained their entry; the lower swelling merely feeling very soft. My previous suspicion, upon opening the tumours of the poll and shoulder, that they were organized bodies, became greatly strengthened. In further confirmation of the fact, I placed one of them in the hands of a scien-

tific gentleman of this town, who, possessing a powerful microscope, examined it, and stated that it was unquestionably an organized body, although it was too much decomposed to delineate. Upon inspecting one that had been steeped in spirit with an ordinary microscope, and upon raising, with the point of a penknife, what appeared to be the anterior part, an oval opening, having every appearance of a mouth, was distinctly discernible. I much regret that, until I discovered these bodies in the tendons, my attention was not—I own it with some shame—sufficiently excited to prompt me to an examination of them, otherwise the quantity contained in the poll would have afforded me abundance of specimens. It has been observed that “life may be supposed to attach to the most simple form of organization;” and with respect to the various tissues and organs of the body in which parasitic animalcules may become located, what part can we presume to claim as inaccessible to their peculiar habitude and mode of existence?

. We have received the flexor tendon, and find it such as Mr. Vincent has described. Altogether, the case is singular and curious; and we return Mr. V. our best thanks for so valuable a contribution to veterinary pathology.—ED. VET.

VETERINARY EDUCATION.

To the Editor of “The Veterinarian.”

Sir,—I SHALL ask no excuse for intruding on your valuable time, believing myself to be, although not a veterinary surgeon, as enthusiastic in the advancement of the profession as the gentleman who subscribed himself “An Admirer of the Veterinary Art” in your last number.

That the veterinary profession must depend upon its members for its advancement or otherwise there can be no doubt; that it is necessary that they should be men connected with the literary world, I have some doubt; because a man fully employed in business has not much leisure time for writing: still, if there exists both capacity and time, so much the better, not only for himself, but the profession at large. I write only as I feel, and, if in error, trust I shall be pardoned.

Your correspondent observes, that he believes it unnecessary for a man in business to be made acquainted with what he calls the inferior portion of the practical part of the profession. I may be

mistaken in my opinion; but I consider there is not a portion of the practical part of the profession that is at all inferior, and I agree with the old saying, that if a thing is worth doing at all, it is worth doing well. I contend, that it is not any disgrace to put on the leathern apron and examine a foot, as to lameness, which I consider not only a most important matter, but a great credit to the party doing so; and the thinking portion of his employers will come to that conclusion, and evince more satisfaction at receiving his opinion as to the seat of lameness, after his having done so. I am not alluding merely to the subject above, but to all cases connected with the horse.

To the pupil or young practitioner, especially, I say, get thoroughly acquainted with the practical portion of every operation that comes under your notice, and, my word for it, you will never regret it.

I know many men of large country practice, who, if they had their time to go over again, would not be without the practical knowledge in connexion with operations, however supposed inferior. I recollect a circumstance which came under my notice about twelve or thirteen years ago, and which I hope I shall never forget. I requested a gentleman, one of the brightest ornaments in the profession, to look at a horse which had met with an injury in the bottom of the foot, where a division had commenced between hair and hoof. It was an agreeable surprise to me to see Mr. John Field (for he was the operator to whom I allude) take off his coat, tuck up his shirt sleeves, and begin to remove the disconnected parts. My impression was then, and is now, that even he (Mr. Field) could not have had the same operation performed by directions so well as he did it himself. And though young in business at the time, I was forcibly struck with the necessity of all parties engaged in the profession being fully acquainted with the practical portion of *all* operations.

As I have an objection to any thing anonymous, I beg to enclose you my card, and to subscribe myself

AN ADMIRER OF PROGRESSION IN THE
VETERINARY ART.

Borough, Dec. 2, 1847.

P.S.—I beg to state that the case mentioned above, although an extreme one, did well.

THREE CASES OF DISEASE IN SOWS.

By W. A. CARTWRIGHT, *M.R.C.V.S., Whitchurch.*

I.—CASE OF INVERSIO UTERI IN A SOW.

ON the 9th of November, 1847, I was sent for to Viscount Combermere's farm-yard (Park View) to see a sow, two years old, that had farrowed eight fine pigs. She commenced farrowing about half-past eight, A.M., and was not above an hour in labour, and afterwards all was thought to be going on well. She was seen about one, P.M., apparently doing well. At half-past one, a large tumour, the size of a man's head, was seen protruding out of the vagina, and soon afterwards the whole of the uterus was inverted. The parties present could not put it up, and I was sent for. I saw her about half-past three, P.M., but found she had died a short time before.

Post-mortem examination.—The whole of the uterus, which was hanging out behind her, I cut off close to the body, and laid on a table for examination. The length of the vagina cut off was one foot; its width, five inches. The length of each curved horn was twenty-seven inches, and averaged about five inches in width. The whole of the horns, except a very small portion towards the Fallopian tubes, were completely inverted, and its mucous membrane was thickened, in many places abraded, and of a dark venous hue. About the middle of the right horn there was a complete transverse rupture four inches in length. There was a great quantity of blood behind her, in her bed, and I have no doubt the cause of death was hæmorrhage from its inner surface and the rupture.

Observations.—I really do not know a more difficult or embarrassing case to be called into than one of inversion of the uterus in the sow. It is a very different affair to that in the mare or cow. *There*, even if there should be twins, there is in a great measure nothing more than a single sac to re-invert; but *here*, there are two horns of an immense length, branching out on each side from the vagina itself. In consequence of the fœtuses lying in different places, the interior parts of the horns form somewhat irregular sacs, varying in diameter, something similar to the cells in the large intestines of the horse. From the size of the vagina, it is my opinion only one of the horns can become inverted at a time, since there would not be room for them both to pass through at once. Now, from the particular structure of the interior of the cornua,

and from their great length and size, it must be seen that it is a very difficult business to re-invert them, especially when one has such an irritable and restless subject to operate on. I conceive that the best plan to re-invert them would be, to have, for such a case as the present, a wooden staff or pessary, at least thirty inches long, with a bevelled bulbous end thereto, similar in shape to that of a constable's staff. We should apply the bulbous end of this staff to the extremity of one of the horns, and gradually force it up into the interior of the horn, pressing in at the same time its sides. In so doing we must be particularly careful not to apply too much force, otherwise we shall rupture its tender tissue. In the case before mentioned, the great bulk of the muscular fibres was circular, and the rupture was not across them, but seemed as if the cellular membrane connecting a bundle of fibres was merely torn. From the fibres of the muscles lying in this circular direction, of course there would be, by using undue force, more danger of rupturing the uterus than if they were disposed to a longitudinal character. Having re-inverted and forced up one horn, we must serve the other in a similar way. But I fear, from the comparative narrowness of the vagina, that, when we come to force the horn through it, there will be great difficulty in doing so, on account of the other horn being still within the passage; each horn being as large as the vagina itself. If we cannot succeed, of course we must pass either a single ligature around the neck, previous to its bifurcation, or, I think a preferable plan would be to pass a double ligature through the middle of it, and divide it into two portions, which ought to be tied separately; and afterwards to amputate the uterus. In passing the ligature or ligatures around either the uterus or the vagina, we should be careful not to fasten them too high up, as it is possible we may include a portion of the bladder; since, in the present case, though I am not quite certain of the fact, I am almost inclined to believe that, in the act of dividing the uterus or vagina, I cut through the bladder, as a quantity of urine immediately issued, although I am aware it may do so without any such division.

II.—CASE OF SPINAL DISEASE IN A SOW.

On the *5th June* 1847, I was called in to attend a sow that had seven or eight pigs, a month old, suckling on her, the property of Viscount Combermere. I was told that on the 2d instant she was perfectly well; but that on the 3d instant, in the morning, she was

seen to be very weak in her hind quarters, and had gradually got worse.

Symptoms.—Feeds tolerably well. Milk nearly gone. Lies down most of the time. With some difficulty she is able to get up. When up, she can but barely stand, or move along by being propped up on each side, and her legs are crossed under her body, in every direction, while she is in the act of walking. Her weakness appears to originate in the spine, as she totters and bends in a marked degree from that part. Respiration about natural.

Treatment.—As I believed the disease originated in the spinal nerves, I took about a pint of blood from a vein that ran over the outside of the left hock, near to the os calcis. I tied a cord around the thigh, which soon dilated the vein. I first of all tried to find a similar vein to what there is in the horse on the inside of the thigh, but could not raise one. I could easily feel the femoral artery, but durst not open it; though it might have been easily done, as it lay very superficially.

Give hyd. chlor. gr. iss, ant. pot. tart. gr. ij, sem. colchici gr. iij, in a pill, night and morning, until they have some effect on her. Rub some ung. hyd. bin. cum ant. pot. tart. along the spine, after having washed the parts well with soap and water with a hard brush. To be kept quiet.

8th.—She is a little better, being able to move her hinder parts quicker, and stand on them more firmly; but when walking about she crosses her legs a good deal, and each doubles under and knocks against the other. At times she stands on the point of the fetlock joints. Feeds better. The blister has taken but little effect, although it was very strong (hyd. bin. 3j, adipis 3j, cum ant. pot. tart.) No injurious effect, neither nausea nor purging, has been seen from the medicine. Continue the medicine, and rub some liquid blister on the loins. Took about 3iv of blood from one of the hind legs. Would have taken more, but it bled badly.

21st.—She has been taking the medicine regularly from the first without any appearance of disagreeing with her, or producing any ill effect. I now found her a great deal better, as she could run about almost as fast as usual; but she was still weak and crossed her legs, but nothing like as at first. R. pulv. helleb. alb. gr. xlv made into xxx pills, one to be given twice a-day, unless any bad effect be produced; and the strong blister to the loins to be repeated. The other did scarcely produce vesication, or indeed swelling of the parts. Her appetite does not fail her.

July 1st.—Nearly well.

6th.—Quite well.

III.—CASE OF SPINAL AFFECTION AND DISEASE OF THE STIFLE JOINTS IN A YOUNG SOW.

May 19th, 1847. I this day saw a six months' old sow, belonging to Viscount Combermere, that had been presented to him by Prince Albert some months before.

Symptoms.—It is excessively fat, and does not fail eating its meat. On walking along she goes very stiff and slow. In respect to her *fore legs* she seems as if the flexor tendons and suspensory ligaments had given way, since the back of the fetlock joints come at every step almost to the ground, similar to what they do in a horse that is broken down; and the claws in the front stand wide apart, and project outwards. There is no other peculiarity in the fore parts.

HIND PARTS.—Now, here, the contrary position exists; for she is actually standing on her tip-toes, and there is a general contraction and stiffness in the flexor tendons. There is no weakness or tottering from side to side, but a stiffness in the hind parts, and a peculiarity of standing on the tip-toes.

Treatment.—Thinking there might be some rheumatic affection of the muscles and joints of the hind parts, I ordered her to be put in a hot bath for half an hour at a time, for five or six days together, and gave hyd. chlor. gr. jss, ant. pot. tart. gr. jss, sem. colchici gr. ij, night and morning, in a pill in her meat. Reduce her food to two meals a-day.

25th.—But little improvement. Blister the spine. To have a little exercise at grass.

June 5th.—She is not near so fat, but will eat any thing that is given to her; and we think she walks more lively and better. Blister the part with ung. hyd. bin. cum ant. pot. tart.

7th.—But little alteration, though I think she is quite as well as she was. Continue medicine, and rub some liquid blister on the spine.

21st.—No better. Her hind quarters, I think, waste. Looks lively, and feeds well. She always humps her back; and her legs go straight forward, one after the other. I ordered her to be fed sparingly.

Sept. 23d.—From the last date she has not at all improved, and has continued to walk on the tips of her hind toes, in the manner she has done all along. Has fed well, but has been rather stinted of meat. Seeing no amendment, or any likelihood of such taking place, his Lordship ordered her to be killed, being good pork.

Examination.—She was about five score pounds weight. On

dressing her, the butcher discovered that her stifles were much enlarged. On laying open these joints, I found that they contained a little sanious matter, and on disarticulating the tibia from the femur, I found that the heads of both these bones were carious to a great extent, especially on the inner surfaces, and that the heads of the bones surrounding the joints were *much* enlarged. I did not examine any other joint, as she was good meat. Her spine was then sawn through. Over the loins the spinal marrow was decidedly red and inflamed, and very different to any part of the remainder. The inflamed part had streaks of bloodvessels running both on the theca and in the texture of the cord. The other part of the cord was beautifully white.

His Lordship, Captain Cotton, and Mr. Blantern, the bailiff, were present at the *post-mortem*. Several other similar cases have occurred at the Favon-yard, and I have every reason to believe it is not a rare disease.

PLEURISY—RHEUMATIC INFLAMMATION—HYPER- TROPHY OF THE HEART—DEATH.

By WILLIAM PERCIVALL, M.R.C.S., and V.S.

A BLOOD MARE, four years old, of slender form, but with limbs and other points such as bid fair, one day, to render her powerful enough to carry weight, was out of health at the time she was purchased for my regiment, which was in April last; she, however, in a few weeks appeared to have recovered herself, and was about to be taken to be broke in, when she was seized (11th Aug.) with the influenza, prevalent about that time. This, though slight, and apparently trifling at first, stealthily increased on her, and at length ended on the 16th—five days after—in decided pleurisy. Being low at the time, it was deemed inadvisable to let blood; however, her symptoms had become so much aggravated—her breathing so irksome—that, on the 19th, there was no longer resisting blood-letting; and accordingly her jugular was opened, and she bore extremely well the abstraction of seven pints of blood. The effect of this was, that, on the 20th, her breathing had become tranquil, and the mare was decidedly better. From this time, with the aid of medicine and counter-irritation, she tardily progressed in returning health, was led out every day, and thought to be, though slowly, still surely, amending; when,

ON THE 28TH SEPT, full a month from the time she had shewn signs of convalescence, she became suddenly attacked with lameness in her off fore leg. On the first, there was no swelling or any heat or other sign to account for the lameness; on the day after, however, the back of the fetlock-joint exhibited that puffy tumefaction and heat and tenderness which, plainly enough, indicated the nature of the case. It was rheumatic inflammation of the synovial tissues, originating in metastasis from the membranes of the thorax. It seemed extremely doubtful whether the lameness had been at all mitigated, or had its course abridged by any treatment that was pursued; among other things was tried a mixture of tincture of arnica and water—the remedy that is such a favourite for allaying inflammation with many surgeons—but that seemed equally of no effect.

By the 14th of October, however, she had pretty well recovered the sound use of her limb, when as unexpectedly as the off had been the *near* fore fetlock became attacked with the same ailment. From this she recovered in about the same space of time—a fortnight or thereabouts—when,

ON THE 3D NOVEMBER, a puffy swelling of considerable volume arose in the seat of strangles, extending thence to the muzzle, involving the lips, particularly the lower lip, in the tumefaction. The puffiness and sense of insubstantiality it gave to the feel, shewed at once that the swelling was not strangles; and yet it was difficult to say what it was, or, rather, whence or from what cause it originated. It was treated simply by fomentation, the mare being too weak to bear much medicine, and, furthermore, had more than once shewn some tendency to diarrhœa. In a week's time the swelling had a good deal abated, when a similar tumefaction made its appearance underneath the belly. Here, to the feel, instead of being puffy, the tumefaction exhibited consistence and solidity. Nevertheless, it was œdematous; and yet there was no appearance whatever of swelling in the legs. All this while the mare's appetite had not failed her. She ate very well, and took her rest, though evidently not in the condition or strength she had been, even since her pleuritic attack. From the 10th—the day on which the swelling under the belly first appeared—until the 18th Nov., she had been going on very unsatisfactorily, and from time to time had shewn signs of returning diarrhœa; which I was compelled to repress by doses of the pulv. cretæ comp. cum opio: an invaluable medicine in such cases. She was now in a state in which little hope remained of saving her, her appetite having for the first time failed, and unusual depression having come on. From the increase of the sub-abdominal tumefaction to the breast between the fore legs, I was disposed to think effusion of water might have taken place

into the chest. To ascertain this I examined her chest by auscultation. Hearing distinctly, however, at every part the respiratory or bronchial murmur, I relinquished this notion, and thought there might be effusion into the cavity of the belly. Of this, however, I possessed no assured evidence, the belly not appearing larger than natural. While in this state of doubt and uncertainty as to the perfect nature of her case,

ON THE MORNING OF THE 20TH NOV. the mare was found dead in her box: she having, as it would appear from the posture in which she was lying, and the undisturbed state of her bed, fallen and died suddenly, without a struggle, some time in the course of the night.

Post-mortem.

PLEURA, everywhere covered with multitudinous meshes of red vessels, having that dull red hue which denotes inflammatory action to be on the decline, or rather to have terminated in congestion. On the near side of the thorax were several strong adhesions of the lung to the side. No water was found in either cavity of the thorax.

LUNGS, sound, and of their natural variegated pink hue.

HEART, strikingly large, filling its sac to that degree, that, apparently, no room was left for it to beat. Its ventricular cavities were full of blood, and were evidently, in particular the right, anormally large and capacious. There was blood also in the auricles, but their cavities were rather flaccid than distended. When cleansed of its blood, the heart weighed $7\frac{1}{2}$ lbs.: this was no great weight; and yet, when the slender make of the mare came to be considered, it was anormally large for her. It was a case, in fact, of *hypertrophy* WITH DILATATION. There was no sign of disease in the tissue of the heart.

THE ABDOMEN contained several quarts of serous fluid, of the lightest possible straw colour, perfectly limpid, and odourless. The quantity was not sufficient to be likely to occasion any disturbance or inconvenience. The addition of nitric acid immediately clouded it; heat did the same.

THE LEG LAST ATTACKED WITH LAMENESS was examined. The fetlock joint was quite healthy, as were the tendons and ligaments in its immediate vicinity and above it. The only part diseased was the bed of cellular tissue interposed between the flexor perforans tendon and the long sesamoid ligament, at the back of the pastern bone. This tissue shewed violent inflammation, the dulness of their red colour and the want of full distention of the vessels indicating that the inflammatory action was there likewise on the decline.

Reflections.

I cannot help thinking there is a striking analogy between the present case and one I published in the year 1846, in vol. xix of *THE VETERINARIAN*. In both cases there was primary membranous inflammation within the chest; there was erratic or rheumatic lameness; and there was disease of heart, causing death suddenly. Still, there exist differences; some reconcileable, others not apparently so. That the thoracic inflammation in the case before us should be exclusively confined to the pleura, while in the former case it was visceral as well as membranous, seems no great matter in our rationale. But, that the lameness which, in the former case, was found to arise from inflammation of the synovial membrane of a joint and effusion of lymph into its cavity, should in the present one prove to have had its origin in inflammation of cellular tissue interposed between tendon and ligament, somewhat, perhaps, disturbs the analogy. More than by this, however, is the analogy lessened, when we come to make the comparison between the disease of heart in one case and in the other. There can be no analogy, one would think, between disease of the semi-lunar valves and hypertrophy with dilatation. The only question for us to ask ourselves appears to be, can one and the other disease of heart be regarded as the same consecutive link in the chain of causation? If so, then is one case still analogous to the other.

For the present, I would rather leave the subject here than pursue it further. A good deal more might be said about the case. Something might be thrown out to account for the dropsy, internal as well as external. I would, however, for my own part, I repeat, rather await the recurrence of similar cases, than venture upon the wings of theorization. I cannot help suspecting that diseases of the heart, in fatal cases which pass off as "inflammation of the lungs," *are too often overlooked*, and that the fault is, consequently, thrown upon the lungs—upon the practitioner perhaps—when all the while, had the heart been inspected, the mark of death's arrow would have been plain and visible enough. Mr. Pritchard, the well known skilful veterinary surgeon of Wolverhampton, was the first to call my attention to the subject of cardiac disease in the horse, through some admirable papers on the subject he published in the years 1833-4, in *THE VETERINARIAN* (vols. vi and vii); from which time I have rarely, if ever, failed, in cases said or thought to be pulmonary, to examine the heart, and with a great deal more attention than I had been in the habit of ever doing before; and the result to me has been highly satisfactory.

TUMOUR IN THE BRAIN, AND DEATH FROM IT, IN A HORSE.

By Mr. WEBB, London.

Sir,—THE following case appears to me somewhat singular. Not having met with any thing of the kind before, nor having heard of such a one from any other person, is the inducement to send it to you. If you consider it worth a corner in THE VETERINARIAN, it is quite at your disposal; at the same time, should I not be considered an intruder, I should much like your opinion concerning it.

The patient was a compact chestnut cart-horse, five years old, the property of Mr. Batty, a dealer at Whitechapel. Mr. B. had purchased him at a fair two days previously, and had sold him. I was sent for at 9 A.M., the messenger saying, I must come directly, for one of the horses had the mad staggers. When I arrived, the following symptoms presented themselves: Throwing himself about in all directions—the respiration greatly increased—his eyes having a wild appearance—and once he threw himself under a cart that was standing near. I then thought he was fixed; but he soon cleared himself, and plunged against the counting-house door, and broke it. He then recovered himself, and became calm for a few minutes. During this intermission I plunged my lancet into the jugular vein, took a great quantity of blood from him, and gave aloës 3x. After this he became more furious, and died in about an hour.

Post-mortem Examination.

Stomach perfectly healthy—the intestines likewise: within the large intestines were found about one hundred small pebbles. Conceiving that nothing of this kind could cause him to be rabid, I examined the brain; and was surprised to find a hard tumour, about the size of an egg-plum, within the lateral ventricles. The corpora striata and hippocampi are much flatter than I had ever seen them, being made so by this hard substance.

There was another tumour in the cerebrum of the same description, but of smaller size. I was asked if this horse was sound when Mr. B. bought him. I said he could not be. And as the seller was not aware of the unsoundness, he ought to, and did, refund the money. Now, the seller had bred the horse, and he said he never had any thing the matter with him before in his life.

P.S.—Perhaps the two following cases are also worthy of record:—

TWO CASES OF PSEUDO-GLANDERS CURED WITH CREASOTE.

By the same.

THE patient was a brown pony, twelve years old, the property of Mr. Williams, of Whitechapel. The membrane of the nose was inflamed and ulcerated, and there was a discharge from the near nostril. The submaxillary gland on the near side was firmly adherent to the jaw. The coat unkind. I informed the owner there was but little chance for the pony. Being, however, a great favorite, the owner told me he was prepared to allow both time and expense, providing the pony could be brought round. I gave cantharides, five grains daily, with a drachm of sulphate of copper, ginger and gentian one drachm each, for fourteen days. No better. A few farcy buds on the near thigh. I then gave diniodide of copper in drachm doses, continuing other medicines for about a month, and had the gland dressed with iodine ointment, and passed a seton over the nasal bones. The gland has grown softer; but the discharge from the nose is no better: it hangs about the nostril, and smells badly. There is also now a discharge from the other nostril. The owner not wishing me to despair, I altered my treatment. I gave 3j of creasote in water twice a day, and had a weak solution injected up the nostril every other day; having him cast, and his head held up for the purpose. This treatment I continued for about six weeks, when the pony proved perfectly cured. The owner was much pleased. This happened in the year 1844, and I saw the pony in September 1847; he was then perfectly well: the owner informed me he had never had a relapse.

The second case is a bay gelding, the property of Mr. Moses, of Aldgate; not Moses the tailor.

The patient is eight years old, fifteen and a half hands high. He was at livery at the Bull Inn, Aldgate. Mr. Nelson, the owner of the stables, considering him a glandered horse, would not have him on the premises any longer. I had him sent to my infirmary.

Symptoms.—The membrane of the nose inflamed and ulcerated; gland fixed to the jaw on the near side; the discharge from his nose has an offensive smell. I passed a seton over the nasal bones; gave a drachm of creasote in water twice a-day, and injected a weak solution up the nostril. This treatment I continued for about six weeks, when he was sent home perfectly cured. This took place in the year 1845. I saw him in October 1847; he had continued well.

AN ACCOUNT OF CERTAIN ABNORMAL FORMATIONS FOUND IN THE BRAIN OF AN AGED PONY.

By Mr. HAYCOCK, Veterinary Surgeon,

(Member of the Veterinary College, Edinburgh)

Huddersfield.

THE following case I have deemed worthy of record, simply from the fact of abnormal formations existing in the lateral ventricles of the brain during life, without giving rise to any manifest disease, or derangement of function of any kind, in the animal in which I discovered them.

In order, therefore, to give the reader clear ideas of the case I am about to describe, I will first relate such particulars respecting the animal as will enable him to do so in every essential. The subject of this case was a pony, the property of a gentleman residing in this town. The animal was fourteen hands high, of a bay colour, of the cob breed, and at least eighteen years of age: he had been in the possession of his owner about three years, during which period he had never suffered from disease of any kind (save a slight attack of the epidemic which prevailed hereabouts last winter); nor, from what I can learn after every inquiry, was the animal ever known to be affected with illness. On the 8th of November, 1847, it was deemed necessary to clip the animal, and at night, after the operation was performed, he was taken out of the stable to be smartly galloped; and when returning home again he was accidentally run against by a horse and truck, the shaft of which pierced his side, fracturing three ribs, and inflicting such other injuries as to cause death in about two hours afterwards.

Examination twelve Hours after Death.

State of the lungs, heart, &c.—The contents of the chest were perfectly healthy. The lungs did not exhibit the slightest trace of disease; the heart was also sound and firm in structure, and weighed seven pounds avoirdupois.

State of the digestive organs.—The abdominal cavity contained a large quantity of liquid blood, in which was mixed fæcal matters, that had escaped out of the colon from a large opening or rent caused by the shaft of the truck lacerating it, when the concussion took place: otherwise the bowels and stomach were perfectly

healthy. The liver was quite free from disease or enlargement, no softening nor paleness in colour, but perfectly firm; which is a fact, I believe, not generally observed in aged horses when examined after death.

The head and a portion of the neck I had removed for the purpose of dissection; and it was in taking out the brain that I observed the structures I shall next describe. On removing the encephalon from its bony case, I found at the base and at the external part of the organ, a number of white granules of a similar form and about the same size as grains of rice after being saturated with water. These granules were collected in scattered groups, which groups allowed of being easily broken up, for they did not adhere to the brain but to a vascular-looking network of fibres, which came out of the interior of the brain and rested upon the bones forming the brain case.

On removing the substance of the cerebral hemispheres and the corpus callosum, and thus exposing the lateral ventricles, two singular looking bodies were fully exposed to view, which bodies I will successively describe as they *then* presented themselves.

One of these bodies is larger than the other; the smaller occupies, or rather is placed in, the right ventricle; the larger in the left one.

The length of the small body is one inch and six eighths; its superior half is lobulated; and its colour is that of a dirty looking grey; its form is ovoid; it rests upon or against the corpus striatum; its superior extremity touches the hippocampus major; and its inferior extremity extends into the inferior cornu; attached to it superiorly and posteriorly is a small portion of the choroid plexus; it appears, in fact, to have its matrix within the plexus. The portion of brain against which it rests or presses presents a faint red blush of a somewhat dull aspect. The weight of this body is exactly 3ijss.

The large body, I have stated, rests within the *left* ventricle; it is similar in every respect to the small one with regard to colour, form, &c.; its length is two inches and five eighths; its circumference three inches and three eighths, and its weight 3vj. This body, from pressing upon the floor of the ventricle, has caused that portion against which its inferior half rested to be entirely absorbed; while the remaining portion is considerably thinner than natural. Throughout the portion that remains, against which the body *immediately* rests, is also a red blush, which is much deeper in tone than the colour in the ventricle.

These bodies are entirely composed of the rice-looking granules, which have all their nucleus in the plexus choroides; and they all appear to take one general course, and that is a longitudinal one. A granule can easily be separated from the mass, and several of

them I have measured and found to be about one-eighth of an inch in length and from one-sixteenth to one-twelfth in circumference. The membrane which invests them is white, dense, and fibrous in its physical characters; its interior consists of a delicate network of the same kind of fibre, in which is deposited a quantity of very minute grains of what appears to be chalky matter; and these grains are deposited in the delicate network in a manner very closely resembling the deposit of bone in the osseous tissue. These particulars I have fully satisfied myself respecting, by careful and repeated microscopic examination.

I next placed a portion of the substance apart, and after it was carefully dried, I weighed half a drachm of the same, which I burned, and which left exactly eleven grains of earthy matter. The substance burned rapidly, with a large flame, emitting no perceptible odour.

* * Mr. Haycock sent us a portion of the granular mass, as well as the residue of the incinerated portion; and through the kindness of Dr. Babington we have obtained a correct analysis of them by Dr. Rees. Their composition Dr. R. has found to be "membranous tissue cemented by fatty matters (principally cholesterine, and phosphate of lime. The earthy salt is in large proportion." No carbonate of lime was found; "so that the earthy ingredient is not bony."—ED. VET.

Remarks.

For such deposits as the above described to exist in the brain (an organ so essential to the integrity of life in the higher animals), without giving rise to any symptoms to indicate their existence during life, appears very remarkable; and can, I apprehend, only be accounted for on the supposition that their development was very slow. To have suddenly appeared, would, I may assert, have given rise to such effects as in themselves would certainly have been noticed; but, from the growth of these bodies being slow, those portions of brain in immediate contiguity with them would gradually accommodate themselves to the change, independent of any perceptible change in function.

Similar morbid products are stated by Dr. Copland as being found occasionally in the lateral ventricles of the human brain, without any disease being suspected during life. Page 207, vol. i, of his *Dictionary of Practical Medicine*, he says, "*The choroid plexus*, and the *vascular plexus* of the fourth ventricle, which are all productions of the pia mater, are often found remarkably dis-

tended with blood, and their *vessels varicose*, particularly when the pia mater has its vessels overcharged. The choroid plexus is also sometimes uncommonly pale and exsanguine. This generally occurs when considerable effusion of serum has taken place in the ventricles, especially when the effusion is connected with debility. Sometimes the plexus contains a number of transparent vessels, and it occasionally presents a *granulated* or FLESHY appearance. This has been ascribed to a morbidly enlarged state of the glandular apparatus, with which, in the opinion of some anatomists, this structure is naturally provided. *Gelatinous tumours* about the size of a bean, and surrounded by a cyst, have also, though rarely, been observed in this situation. Tumours of a *cheesy* or *sub-cartilaginous* consistence, the size of a pea, are likewise found, in some rare cases; and occasionally these tumours contain *ossific deposits* in their centres. *Bony* and *earthy concretions* are still more rarely met with in the choroid plexus than in the membranes. All these morbid changes have been most frequently observed in apoplectic, epileptic, and paralytic cases; but they have also been frequently detected where no particular symptom referrible to the nervous system had manifested itself during life."

With reference again to the cause of these formations, I believe I may safely state, that nothing decisive can be stated upon the matter. The use of the plexus choroides is principally to furnish the serous fluid, which is known to always exist more or less in the ventricles during life; but whether this fluid be *secreted* or simply exhaled from within the vessels forming the plexus, is a question I am not prepared to decide; for, with respect to what is said relating to its structure and function, all that I can read upon the matter is very diffuse and unsatisfactory. If the plexus, however, be a *gland*, then we can suppose, that from some unknown cause its function in the present case became changed; and that, instead of the normal secretion, the products I have described were produced: but on this supposition even innumerable difficulties present themselves, which to state here would not be attended with any profitable result; for all that could be advanced would be mere hypothesis or bare conjecture.

In conclusion I may remark, that, with respect to the ultimate effect which might have been produced by these growths, had the animal continued to live, nothing positive can be said. I believe the masses might have gone on increasing in size, and causing absorption of portions of the brain for years, without any disturbance in the cerebral functions manifesting themselves; for "of all the organs of the body, the brain is the most exquisitely and incomprehensively formed, and presents the least intimacy of con-

nexion between the results of dissection and the phenomena of disease. The most violent symptoms referrible to this organ often exist during life; and yet, on the most careful examination after death, either no appreciable lesion, or none sufficient to account for the phenomena, can be detected; whilst, on the other hand, many and most important changes are frequently discovered in both the brain and its membranes, in cases which betrayed either *no cerebral disorder*, or none calculated to excite suspicion during life of any organic change."—*Copland's Dictionary of Practical Medicine*, p. 201, article "Brain."

THREE CASES OF SUSPECTED POISONING IN DOGS.

By JOHN TOMBS, *M.R.C.V.S., Stratford-on-Avon.*

To the Editor of "The Veterinarian."

Sir,—I SEND you a history of three suspicious cases of poisoning in dogs. At first, rabies was suspected, on account of the dogs being taken ill at stated periods, similar to their sickening for madness after being bitten. Another circumstance that strengthened this supposition was that the old bitch, when pregnant, attacked a strange dog, which bit her. The first two cases are recorded by the proprietor: the symptoms of the third case I ascertained by interrogating the owner, and made a post-mortem examination of the dog, which leads me to believe that he had been drugged.

I am, Sir,

Your's respectfully.

CASE I.

July 1847.—A pointer bitch, three and a-half years old, with puppies seven weeks old, died about the seventh day.

Symptoms.

1st day.—The bitch looked thin, her bag a little swollen: she was cross to her puppies.

2d day.—Bag more inflamed and swollen.

3d day.—Symptoms the same, but she is very cross to her puppies. Gave sulphur, and fomented the bag.

4th day.—Very anxious and uneasy: she looked often for a fresh place to lie down upon. Gave more sulphur. She barked distressingly, with only short intervals of rest.

5th day.—Very weak, often looking sharply back at her loins, as if stung by some insect. About mid-day she had a slimy evacuation, with worms. Cross to her master when interfered with, and inclined to be sick from the commencement.

6th day.—Free evacuations of urine. Still very cross to her puppies, and almost incessantly barking. There is difficulty in swallowing.

7th day.—Similar symptoms till about three o'clock; she then slept for two hours, and, on afterwards drenching her with gruel, it choked her.

On opening her after death, the lungs were found to be a little inflamed, and the windpipe and air-cells of lungs filled with frothy mucus. The stomach was quite empty. The bowels, particularly the lower part, contained a copper-coloured fluid. There was no discharge from the eyes or nostrils during the whole illness.

CASE II.

Aug. 30, 1847.—This was a bitch puppy that was taken ill about a month after the old bitch died.

Symptoms.

Monday.—In the morning very anxious and irritable; cross with other dogs; fondled with her master, and wanted to be nursed: toward night she grew weak, and during the night barked incessantly.

Tuesday.—Very sick and irritable; barked only at intervals. I gave an emetic. After she had been sick, towards night she became more quiet. Gave gruel, and put a seton in her throat: afterwards an evacuation, natural in appearance.

Wednesday morning, six o'clock.—Dead. She had not been cross at the latter part of her illness. No discharge from the eyes or nose. The balls of the eyes turned backwards towards the head. On opening the body, the lungs were nearly clear; no mucus; the stomach slightly inflamed, the intestines highly so: in one place, about the middle, the gut was thickened about the sixteenth of an inch.

CASE III.

This animal was brother to that in Case 2, and nearly four months old.

Symptoms.

1st day.—Loss of appetite—uneasiness and sickness: immediately after swallowing liquids, vomiting took place, and continued until death on the 3d day. A peculiar barking was observed at intervals, and which lasted throughout. No cough or sneezing at all. On the 4th day the dog died, and on the morrow, October 11, the appearances after death were:—sublingual glands inflamed—the cellular tissue situated between the posterior maxillary bones congested—buccal membrane discoloured—rima glottidis slightly injected—the fauces very much inflamed—stomach quite empty—the cuticular and villous coats highly inflamed, the latter drawn into folds—the small intestines inflamed and thickened, and contained mucus—the rectum distended with a coffee-coloured fluid: the lining membrane had many pustular eruptions on it, which is most remarkable. The whole gut was intensely inflamed; the investing membrane of kidneys inflamed, as well as the cortical part of those glands.

VETERINARY JURISPRUDENCE.

Court of Common Pleas, Dec. 16.

NISI PRIUS SITTINGS AT GUILDHALL, before the LORD CHIEF JUSTICE and a SPECIAL JURY.

SMART *v.* ALISON.

Mr. Cockburn, with whom was *Mr. James*, appeared for the plaintiff, and *Mr. Knowles* for the defendant.

This was an action to recover damages for the breach of a warranty given by the servant of the defendant to the plaintiff, on purchasing from him a black gelding at Howden Fair, on the 2d of September, 1846. The evidence adduced in the case was of great length, and occupied the time of the Court during part of yesterday's and the whole of this day's sittings.

On the part of the plaintiff, witnesses were called to prove the following facts:—That the black gelding had been purchased at Howden Fair for the sum of 150 guineas; that he was conveyed from the defendant's residence, in the county of Durham, with the greatest care, to the plaintiff's stables at Cricklade, in Wiltshire, the distance, with the exception of a few miles, being travelled by railroad. That, having remained there about a fortnight, he was sold to a gentleman of fortune named Hardy, in Warwickshire, for £200; that he was taken to Mr. Hardy's residence by easy stages, and about a week after his arrival was discovered to be lame; the lameness proceeding from a diseased state of the fore feet, caused by laminitis. Mr. Hardy, who had received with the horse the same warranty as the plaintiff had got from the defendant, immediately sent him back, and, the purchase-money having been returned to him, the present action was brought. Mr. Stanley, a veterinary surgeon consulted by Mr. Hardy, Mr. C. Spooner, Professor of Anatomy at the Royal Veterinary College, and Mr. Field, a veterinary surgeon in town, consulted by the plaintiff, all pronounced the horse to be unsound, the structure of his fore feet, particularly the off one, having been permanently impaired by laminitis. This disease, which is usually called "fever of the feet," they described as commencing with acute inflammation of the laminae, substances which lie between the coffin-bone and the exterior hoof, protecting the latter from being pressed by the former. If the inflammation be so acute as to induce inflammation, the coffin-bone falls down upon the hoof, and the horse becomes permanently and incurably lame: if it does not proceed to that extent, chronic inflammation supervenes, the coronet of the hoof throws out ridges, the horn at the toe thickens, and the sole or space within the frog becomes so flattened as to touch the ground and make the horse liable to lameness after a hard day's work, or from travelling on the road. The witnesses abovementioned stated their belief that the horse sold to the plaintiff had suffered from laminitis in a modified form, and that the disease, which was marked by the usual symptoms (flat soles and ridges on the hoofs below the coronet), had been in existence some time. As further evidence in support of this case, witnesses were called to prove that the identical horse had been purchased for a Hungarian nobleman, but when he reached Northallerton, where he was to be delivered over to the buyers, proved so lame that he was returned to the defendant. Mr. Payne, an extensive horse-dealer, also swore that, having gone to see the horse and to know what price the defendant put upon him, he asked whether he had ever been lame? And the defendant's reply was, "never, except when he had fever in the feet."

In reply to this case the following defence was set up:—Witnesses were called to shew that from the time the horse was foaled he never had such a disease as laminitis, which from its painful character could not have escaped observation. The farmer who reared the animal till the age of two years, and the defendant's groom, under whose care it remained from that time until sold to the plaintiff, both swore that it had never suffered from any complaint of the kind. The farrier by whom it was shod, and others, deposed to the fact, that the structure of its fore feet had never undergone any alteration, nor was its shoeing different from that of other horses. It was also proved that the horse had been hunted for two seasons, sometimes with the fox-hounds, but more frequently with the harriers. The witnesses called to that point denied most strenuously that he had ever been lame while in the defendant's possession, except on the occasion referred to in the plaintiff's case, when he went to Northallerton; on that occasion lameness being produced by a hurt in the back sinew of the near fore foot, caused by the prick of a thorn in hunting. Evidence was also adduced to shew that when the horse was sold at Dixon's Repository, in December last, by the plaintiff, he was in wretched condition; that he was then purchased back again by an agent of the defendant's for fifty guineas; that he was lame at that time from having chapped heels; but having recovered from this, was ridden in town till the month of July without shewing any sign of the unsoundness alleged by the plaintiff. It was further stated in evidence, that the horse is now again at the defendant's residence at Durham, and that he has not been lame since his return. The only scientific evidence produced by the defendant was that of Mr. Mayhew, formerly demonstrator at the Royal Veterinary College, who stated his opinion that a horse which had suffered from acute inflammation of the lamina could not be hunted.

The Lord Chief Justice, in summing up the case to the Jury, entered at great length into the evidence adduced on either side, and concluded by directing them to find their verdict according as, from what they had heard, they believed the horse to be in a sound or unsound state when bought by the plaintiff.

The Jury returned a verdict for the plaintiff—damages £99..6s..6d.

JONES *v.* CHEW.

IN the Court of Exchequer, an action was recently brought by Mr. Jones, tobacconist, Moorgate-street, against Mr. Chew, livery-stable-keeper, in Moorfields. The plaintiff having occasion

to go to St. Albans on the 20th of August, 1846, hired a horse for that purpose on the previous afternoon, for one guinea, from the defendant. As the plaintiff resided at Camberwell, he proposed that he should ride the horse home at once, and proceed on the following day on his journey. The tobacconist accordingly rode out of the stables at the close of business; but he had not been long gone when he again presented himself at the stables, and, flinging himself off the animal, said he would prefer to start next morning from the stables on another horse, as he could not persuade the one he had originally taken to face the "busses" on London Bridge. The defendant politely told him, all his stable was at his command, and the plaintiff therefore inquired for and selected "Pope's mare," with whose performances he had previously made satisfactory acquaintance.

Accordingly, the worthy citizen made a second start on the following morning at nine o'clock; but, alas! with little better success; for having occasion to call at Watford on his way, he put his nag up at the Rose and Crown, while he regaled himself with the good cheer to be found in that establishment. When "man and beast" had both found the entertainment which they required, the plaintiff would have started for St. Albans, but a storm arose which compelled him, "nothing loth," to defer his progress till the ensuing morning. As he was sitting at his breakfast, however, the ostler informed him that his "mare had fell lame," and on examination she turned out to be quite incapable of continuing her journey. The result was, that Mr. Jones hired a horse and gig, in which accredited vehicle of "respectability" he made his entry into St. Albans, and in which he returned to Watford. Arrived there, he found the mare still unfit for service, and he returned to town, like many others, in the railway, having in the mean time given notice to the defendant to send for his mare. The defendant, however, insisted that it was the duty of the plaintiff to return the mare, and he refused to send for her, while he insisted on being paid for her hire and for the loss of her services so long as she should remain at Watford. The parties entertaining conflicting opinions on this subject, neither of them retracted till March 1847, when the landlord of the Rose and Crown thought the mare was fast "eating her head off," as the saying is, and brought an action against Mr. Jones for her keep, and the luckless tobacconist was ultimately obliged to pay the sum of £32, and, that done, he sent for the mare, and returned her to the owner, who forthwith brought an action against him for the hire and loss of service above-mentioned; while, as a set-off thereto, the plaintiff brought this action to recover the sum paid to the landlord of the Rose and Crown, the sum claimed in each being within a few shillings identical. Mr. Chew's

action came on for trial recently in this Court, when the Chief Baron being of opinion that there was an implied warranty of soundness on the part of Mr. Chew, and that Mr. Jones was justified in leaving the mare at Watford under the circumstances, a verdict was passed for Mr. Jones, subject to the revision of the court above. On the present occasion, the evidence given on the former trial was read over to the witnesses, and certain objections having been taken to the right of the plaintiff to recover it, the Chief Baron directed the Jury to find a verdict for the plaintiff. He thought that, in point of law, the defendant, when he let the mare to the plaintiff, impliedly warranted that she was sound, and fit to perform the journey to St. Albans. As she had proved unsound, the plaintiff was justified in leaving her at Watford, where she would be cared for, till the defendant sent for her, which he (Sir J. Pollock) thought it was his duty to do. It had been said that the plaintiff had selected the mare in question; but that did not diminish the obligation at law cast on the party letting her out at hire. If, therefore, the Jury thought that the mare was unsound at the hiring, they should find for the plaintiff; and if the law was incorrectly laid down to them, the court above would do justice between the parties in that respect.—The Jury, without any hesitation, found a verdict for the plaintiff, with £33..1s. damages.

Extracts from Domestic Journals.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

[From "The Mark Lane Express."]

A GENERAL Meeting of the members of this Society was held at the Society's House, Hanover-square, on Saturday last, at eleven o'clock. The Earl of Yarborough, President of the Society, in the chair. Among the members present were His Grace the Duke of Richmond, Mr. Pusey, M.P., Col. Challoner, the Rev. Mr. Linton, Mr. Shaw, Mr. Hillyard, Mr. Raymond Barker, Mr. F. Hobbs, Mr. H. Gibbs, Mr. Westbury, Mr. Emery, Mr. Kinder, Professor Simonds, &c.

Mr. Hudson, the Secretary of the Society, read the report from the Council; which proving highly satisfactory, and being approved and adopted,

The Duke of Richmond rose to move that the best thanks of the

meeting be given to the two learned gentleman who had favoured them with lectures on Tuesday and Wednesday last. They all felt obliged to men of ability and science, who, from their experience and knowledge, gave them information that might be useful to them. He was of opinion that what they wanted was science with practice; and he was sure that every gentleman who had attended the lectures on Tuesday and Wednesday must have been greatly instructed, although the learned lecturers were called upon to address them on a very short notice. He wished in particular to notice the last lecture on the diseases of cattle, which was one of the most instructive to which he had ever listened. He did not mean to say that the lectures of Professor Way were not of the greatest importance and benefit, but that of Professor Simonds was on a subject in which they were all most deeply interested, and what was of great consequence, the learned Professor gave it in language which they could all understand. He hoped they would continue to have lectures on the subject of the diseases of cattle, because it was little understood, and was of the greatest importance to the country at large. It was a duty which they owed to themselves to elevate the station of the veterinary surgeons throughout the country. There were at present many of that class, of ability and education; but their attention was almost exclusively directed to the horse; and those who came from the country must know that their cattle were left to men who had no professional knowledge at all, and whose advice could not give satisfaction. It was, therefore, of the utmost importance that they should elevate the position of the veterinary surgeon, and encourage competent persons to establish themselves in every part of the country, and that the owner and occupier should countenance them and associate with them, and he believed the result would be found highly beneficial to agriculture. He thought they ought to proceed in the course which they had this week adopted; he thought they ought to give give men of science like Professors Way and Simonds every encouragement to come before them, and give them the result of their knowledge and science; and he was certain they would never find the farmers of England ungrateful. He had great pleasure in proposing a vote of thanks to the two learned Professors for the lectures with which they had favoured them during the week.

Mr. C. Hillyard seconded the motion, which was carried unanimously.

Professor Sewell said he felt highly gratified with the eulogium which had been passed upon Professor Way and Professor Simonds for the lectures they had delivered. He thought the society had now taken the right direction, and he hoped they would

receive the support of the society in aid of the Veterinary College. There were many other things which they had to propose to the society besides that alluded to by the noble duke, and which would be found beneficial to this country, but more especially to Ireland, in which it appeared that although they had veterinary surgeons who paid attention to the horse, there was none who give could advice with respect to cattle. He had a plan to propose to them, which had received the sanction of Mr. Powell, of Derbyshire, and which he hoped they would support; but unless they obtained a committee of the society to consider the system, they could not hope to be able to carry it into successful operation. Gentlemen did not, he thought, take a sufficient interest in the Veterinary College, without which its usefulness could not be extended. They had, however, taken the first step in the right direction, and he hoped they would follow it up. He hoped members of the society would visit the College, and judge for themselves. This had already been done by Colonel Challoner, Mr. Hill, Mr. Brown, and others, who appeared to be satisfied with what they observed, and expressed themselves highly satisfied with the education and the practice given in the hospital; and he hoped that their example would be followed, and that other members of the society would visit them. He regretted to say that the Cattle Infirmary had been strangled in the birth; but they hoped, notwithstanding, that the individual members of the society would send to the College specimens and subjects, living or dead. This had been done by the Duke of Rutland, the Earl of Stradbroke, and some others; and he hoped that from all parts of the country others would follow the example. They had, he repeated, taken the first step in the right direction; and he hoped they would continue to turn their attention to the subject. He begged leave to offer them his best thanks.

Mr. Shaw said, that, seeing several representatives of the press present, he was anxious that no misrepresentation or misunderstanding should go forth to the public on this subject. Professor Sewell had observed that they had for the first time taken a step in the right direction on this subject; and he (*Mr. Shaw*) was desirous not to permit that observation to go abroad without explanation. He begged to say that that was not the first step taken in that direction by the society, for it should be remembered that for the last eight years they had voted a sum of £200 a year to the Veterinary College, for the purpose of investigating into the causes of disease in cattle, sheep, and pigs, in addition to those of horses. He would make no further comment on this subject; but he thought it right to say so much in explanation, lest an error should go abroad through the means of the press.

Mr. G. Dyer said that he had listened to what the noble duke

had said with respect to the diseases of cattle. He knew that there was a great number of lambs and calves which died yearly, notwithstanding that medicine was administered; and therefore it struck him that that must arise from something in the pasture. A number of sheep also cast their lambs without being diseased; and he himself was disposed to think that this was occasioned by the red-wort or poppy. Now, it appeared to him that if some gentleman acquainted with botany were sent to different parts of the country to examine the pasture, it would be much better, and more likely to produce benefit than any thing that could be done by doctors. He thought they would do more good by preventing the evil than by curing it. He hoped, therefore, the attention of the Society would be directed to the subject, and that some experiments would be made.

Mr. Cherry said that too much was expected of the pupils who attended the Veterinary College, and that, instead of expecting them to make themselves proficient in the two branches of the profession—namely, that relating to horses, and also that relating to cattle—it would be much better that the pupils should be allowed to make their election for the one or the other, and to graduate for the one which they preferred. He thought that by adopting that system much good would result.

We cannot refrain from noticing a statement, as incorrect as it was uncalled for, made by Professor Sewell at the annual meeting of the Royal Agricultural Society on Saturday last, to the effect that, in procuring a lecture on the diseases of cattle to be delivered at the Society's rooms, "the Society had taken the first step in the right direction;" and he hoped "they would receive the support of the Society in aid of the Veterinary College." He repeated the remark, that the Society "had taken the first step in the right direction." What could have induced Professor Sewell to make an assertion so unfounded in fact we cannot possibly conceive. The Society has in seven years contributed £200 per annum (a sum of £1400) to the funds of the College, and the first useful return it has received is the lecture of Professor Simonds. We wish Professor Sewell would point out any one single advantage which has been obtained in return for that large sum of money. In our opinion, the only "step in the right direction" on the subject which the Society has taken is that by which it has determined to discontinue a payment which has hitherto produced no good results. There is talent to be found in the veterinary profession, as Mr. Simonds has shewn by his lecture; and we doubt not the Society will be able to "take a step in the right direction" for engaging that talent upon some practically useful objects, when

it has the control of the sum of money hitherto placed at the disposal of the Veterinary College. It is, however, satisfactory to know that the course adopted by the Society meets the approval of Mr. Sewell, inasmuch as if the act to which he alludes be "the first step in the right direction," the grant of £200 per annum must have been in the wrong direction; and hence the propriety of not proceeding further in that direction.—*Edit. Mark Lane Express.*

To the Editor of "The Veterinarian."

Sir,—IN looking into *The Mark Lane Express* of Monday, the 13th inst., I was glad to find that His Grace the Duke of Richmond had noticed, in such favourable terms, the lectures which had been delivered by the Professors, Way and Simonds: I allude more particularly to that of the latter.

It always affords me the greatest gratification when I hear of any onward movement in the science of veterinary surgery. Would it had ended there! I cannot let the speech of Professor Sewell pass without a few observations. I deem it unnecessary to make any remark on the right direction of the Agricultural Society towards the Veterinary College (that was very properly noticed at the moment), or the remark on some contemplated improvement to be effected in Ireland. The Professor goes on to say, that the Veterinary College had been visited by several gentlemen whose names he mentions, and also states that those gentlemen "*appeared* to be satisfied with what they observed; and expressed themselves highly satisfied with the education and the practice given in the hospital; and he hoped that their example would be followed, and that other members of the Society would visit them."

I sincerely hope that this invitation will be accepted by many; and I would here take the liberty to suggest to those gentlemen who may so far interest themselves as to accept the invitation to visit that establishment, to ascertain from both Professors and *pupils* the routine of education adopted, more particularly as to the opportunities afforded to the student of learning the practical and operative part of their profession; whether it is usual to assemble the class during *post-mortem* examinations? whether they are allowed to attend and take part in all the operations performed there? also, whether they have practical attendance on the horses sent into the institution and confided to their care, under proper inspection; and if they are allowed, under any cir-

cumstances, to bleed and perform the ordinary minor operations attendant on the administration of medicine? I think that the necessity for such a course of instruction must be obvious to every gentleman who has the least idea of the sort of education necessary for the pupil to be well acquainted with before he be launched into the world as fit to practise his profession.

I am led to these remarks by having heard reports that these most vital and necessary duties are not permitted within the walls of that establishment, or, at all events, not to the extent required; and am utterly at a loss to imagine why this should be the case, as I perfectly recollect that, during the professorship of Mr. Coleman, such was not the case. At that period, two pupils were entrusted with the care of the medical treatment of the horses, and it was so arranged that one went off duty every week, and was replaced by a fresh one: the consequence was, a young man could then leave the College with a practical knowledge of horse tactics, so essential to his insuring the confidence of any horseman under whose observation he came. Imagine a young veterinary surgeon going into a gentleman's stable, incompetent to perform the simple operation of blood-letting: the same observation will apply to the practical instruction he ought to obtain in cattle practice. Every one knows how necessary it must be for the young aspirant to be well accustomed to the method of approaching and handling of cattle, sheep, and pigs, in order effectually to treat their maladies.

I have ventured thus far to throw out the above hints, and should be too happy to find that the reports above alluded to were unfounded; but should the converse be the case, I sincerely hope that the Professor at the head of the establishment will immediately see the necessity of resorting to measures for a better practical instruction of the young persons confided to his care, and just consider that their friends have a right to expect, when they leave the College, that they will do so with such competent practical knowledge as will insure their successful advent into professional life.

I shall not intrude further upon your valuable space by making a long apology for the above remarks, knowing too well that, should you consider them likely to be beneficial, not only to the rising generation but to the public, in your usual philanthropy you will not hesitate to give them a place in your next number.

I am, Sir,
Your's obediently.

Extracts from Foreign Journals.

THE RECUEIL DE MEDICINE VÉTÉRINAIRE for May 1847 contains

“A Summary of some recent Observations on Inoculation with, and Preservation of, the Virus of Sheep-pox, by M. Lebel, V.S. at Brie-Compte-Robert (Seine-et-Maire),” from which we make the subjoined extracts:—

In 1826, Hurtrel d'Arboval asked the question, “whether the virus of sheep-pox, like that of cow-pox, was capable of being preserved for any length of time in capillary tubes”—adding, “that this was a point that could be cleared up in no other way than by accurate experiment.” M. Lebel comes prepared to answer this question, qualified by fifteen years' experience in sheep-pox practice, natural as well as inoculated, and by observations made, since 1829, on twenty thousand cases of inoculation. Speaking ON THE CHOICE OF VIRUS, M. Lebel cautions practitioners against using virus from the *malignant confluent pox*; and at all times when circumstances prove favourable to collect virus from sheep slightly affected with the disease, and especially from such as exhibit a *benignant kind* of pox; in which the pustules are small, far apart, few in number, and full of matter; and to elect such sheep as have taken the disease from inoculation in preference to any that have caught the natural pox. This is an affair of so much consequence in M. Lebel's estimation, that, when he has had no choice but the natural pox, yet has he refused to take matter unless the disease shewed itself to be of the most decidedly *benignant* character: otherwise, and indeed in the majority of cases then even, he preferred using matter he had by him, preserved, with the qualities of which he was well acquainted. The magnitude of the pustule is not of so much importance as its being *isolated*, or far apart from one another: indeed, this is a requisite considered by M. Lebel as *indispensable*. He would prefer for virus large pustules, with rarity and isolation, to small pustules disposed after a confluent character. And an advantage possessed by the large pustule is, that it possesses a serosity in its centre, as well as a circumferent subcutaneous secretion; the latter being that to which all authors have ascribed the contagious property of the pox.

Until the year 1831, M. Lebel had, under the counsel and guidance of other practitioners, shewn little care or choice about virus, when in the July of that year he was summoned to inoculate 400 sheep belonging to a farmer; and having no choice of

matter, the disease being before him in an unfavourable form, he operated with the virus that presented itself in the sheep already labouring under the disease, and in a fortnight repeated the inoculation on such sheep as had not taken the disease. In August following, from pustules resulting from repetition of inoculation in sheep, he inoculated on another farm—it being his annual inoculation—108 lambs. The result was, that of the 400 sheep he lost forty, and of the lambs twenty. The loss of the sheep might have admitted of explanation on the score of the unfavourable turn the disease now and then will take in spite of us; but how came it that the lambs, in another situation, and where all others had done well in former times, should likewise die? It was owing to the deleterious virus employed; and this affair it was that first disabused M. Lebel about indifference of the choice of matter.

There needs no further proof of the contagious property of matter of sheep-pox, be it the product of malignant or benign pox; but it becomes a question, whether or not this property, especially in the latter, does not become weakened under successive inoculations. Hurtrel d'Arboval is of opinion that it becomes so after the fifth time of inoculation. "For my own part, however," says M. Lebel, "I would say rather the *fifteenth* time."

In May 1846, M. Lebel inoculated fifty lambs, the produce of the year. The beginning of June—every thing having proceeded favourably up to that time—sixty-eight fresh-purchased sheep, of ages from one to three years, were turned to run with the flock that the fifty lambs had rejoined. From twenty to twenty-five days afterwards—from thirty-six to forty days since the inoculation of the lambs—some of the new-comers exhibited proofs of infection: twenty of them had got the pox, some confluent, some benignant. Those of the sixty-eight who had not caught the disease Lebel inoculated from the others.

This fact establishes the conservative as well as the infective properties of the virus. And, further, the matter Lebel used on the occasion is the same as has served him *for upwards of ten years*. Nor has he, since November 1840, had any natural pox virus: and such is the difficulty, not to say impossibility, to collect matter from natural pustules, that Lebel has not troubled himself about it, but has contented himself with what he had in possession.

M. Lebel does not, however, deny that the disease, through so many transmissions, undergoes some mitigation, seeing that lambs which he is inoculating year by year with virus which he has by him, experience hardly any derangement of health while the disease is on them, and that it is rare for him to lose more than one in a hundred.

Another question is, what stage ought the inoculated pox to

reach to be for a certainty preservative against the natural pox? And why, when both diseases are present in the same individual, instead of developing themselves simultaneously, the natural pox will become suspended for twelve or fifteen days, and sometimes longer, to allow for the accomplishment of the principal phenomena resulting from inoculation.

In collecting virus for inoculation, Lebel, for choice, prefers a pustule of a spheroid form, moderate size—such as a good-sized hazel nut cut in halves would present—rising well above the surface, exhibiting either a blush of red or a uniform rosiness, and having neither furrow nor eminence upon it. The twelfth day is ordinarily to be preferred, though matter may be collected up to the sixteenth; nay, a pustule eighteen days old will furnish contagious virus: and a single pustule of the required form and dimensions will furnish virus sufficient for three or four hundred sheep.

A question importantly bearing upon what has gone before is, Has the blood of a sheep having the pock the power of communicating the disease? and, if so, if more so in the natural and confluent pock? and up to what period is this property, supposing it to exist, preserved? By way of answer to these questions, Lebel mentions the following experiment:—

On the 15th of November, 1834, two lambs, which, up to that time, had been kept separate, were inoculated from blood drawn from the plat-vein of a sheep in the thirteenth day of his pock. The inoculation produced no effect; notwithstanding both the lambs took the disease afterwards from inoculation with virus, and had pustules rise close by the punctures made by the blood-inoculations.

* * This experiment appears to us any thing but satisfactory or conclusive. The blood may have been—most probably was—infected; and yet a drop or two of it, or as much as would be conveyed upon the point of a lancet, be totally insufficient to transmit the disease. To cite Coleman, who was always particularly happy on this point, a quantity of arsenic might be put into a painful of water, and yet a spoonful of the fluid not poison an animal. *Transfusion* should have been made of the blood of the infected sheep, and then the experiment would have had validity. And, supposing the sheep had shewn signs of having become thereby infected, further inoculation should have been made from the pustules upon him.—ED. VET.

LECTURE ON THE INFLUENCE OF EXERCISE ON MAN AND ANIMALS.

[From "*La Clinique Vétérinaire*," continued from vol. xx, page 515.]

"L'inactivité est la source de tous les maux."

STATICS and dynamics both prove that man is able at his will almost to augment or diminish the power of the horse, providing he knows well how to regulate his exercise. Power residing in muscle, he may render it hereditary even to the third generation. Witness the famous trotters of Orloff's stud. We know that Count Orloff obtained these by crosses between strong Danish or Russian mares and Arabian stallions.

The progressive development of strength and power depends likewise on the feeding following the weaning;—on both, the quantity and quality of the aliments, on the grooming, on the management; lastly, on the period and season of castration.

It must be admitted as a principle, that there exists a vast difference between the two properties demanded in a superior horse,—*speed* and *strength*. It is easy to obtain of an animal what strength it is capable of, so as to suit him to the work required of him; but it is not equally easy to render him triumphant in the race, this last being in an essential degree under the influence of climate.

On the Duration of Exercise.

Endurance of exercise may be regarded as the prime founder of strength. It determines the measure of capacity (capability) of the animal. Experience has proved that, on an average, the horse who expends 100 kilogrammes of strength will withstand this effort for eight hours daily, whether in bearing, an average length of time, 100 kilogrammes while standing, or in trotting gently for eight hours without any burthen.

The proportion here given is to be considered as the *datum* for regulating exercise. Beyond this, exercise becomes work, that is to say, strength begins to fail under fatigue.

The conservation of animals requires that we at all times diminish the burthen in ratio to the increase of speed, and *vice versa*. The same principle ought to serve as a regulation for the duration of exercise.

Of Climate.

According to Aristotle, cold, heat, dryness, and humidity, form the basis of all organizations. Their combinations or degree constitute climate; and this spreads its influence over the organism of beings in general, and determines their especial much or little of vitality, their much or little of energy. One of the principal excitants of organic life is, as everybody knows, heat.

Without stopping to consider this question in a scientific point of view, let us inquire into the direct influence exercised on the horse by climate.

Fahrenheit's thermometer never descends in Arabia lower than 30° at night, while during the day it rises to 80°, sometimes even to 150° in the shade. In spite of this intense heat the horse thrives wonderfully. His bones are more slender, but they are firmer and more resisting than those of the breeds of other countries. The osseous structure, as well as the marrow, is greater in weight. In respect to flexibility and muscular strength, likewise, the Arabian horse has no equal, no more than he has for the energy of his organs of assimilation. The horse of the desert, exposed to burning heat, and living on furze (*bruyères*), will endure thirst for three days without losing any of his energy or courage, while our horses could with difficulty support the same privation for four-and-twenty hours.

Well, these excellent qualities, which constitute the Arabian the first of horses, are the effect of climate rather than of any other cause; and we can no longer doubt this, when we see the Arabian losing them as soon as he is transferred from his native country. Transplanted into our country (France), our climate speedily robs him of part of his individual worth, and his descendants quickly become *French horses*, as in England they become *English*, in Germany *German horses*. This fact has remained too long unknown, on account of our ancestors not sufficiently diving into the study of the influences of climate over animals.

Analogous considerations to these it is which has induced us to call the attention of competent men to the necessity of getting up a MEDICO-VETERINARY TOPOGRAPHY, a work yet wanting to us. Studies on this subject would open a field altogether new to us, equally vast and rich for minds of deep thought, one whose treasures would be found unencompassable by ordinary intellects.

We avail ourselves of this occasion to beg the Society will kindly bethink themselves of some way of accomplishing this, so that the necessary steps may be taken to interest the Academy of Sciences in the question, in order that it may assist us with the

powerful aid of its enlightenment to fill up a void so repugnant to the progress of science.

Without advancing too far, let us simply narrate here some facts tending infallibly to prove the great influence climate exerts on horses.

The horse of South America, imported from Spain three centuries ago, bears no resemblance to the Andalusian horse. The French horses that were taken to Camargue are become small, and exclusively white or grey. All English horses brought to the continent quickly with us degenerate, in spite of every care that can be taken of them. Colts reared in their native land become completely altered under the influence of climate. Normandy every day furnishes proofs of this in the colts of Bretagne and Poitou, which are reared in its rich pasturages, and afterwards sold as Norman.

Thus it is, in inquiring into the influence climate exercises over the individuality of different breeds, that it affects their powers, and renders them fitted for different purposes.

The same likewise explains how all attempts, up to the present, made with a view of ameliorating indigenous breeds of horses by the introduction of foreign blood, have constantly miscarried.

Influence of the Seasons, of Temperature, and of Soil, on Exercise.

1. In winter, when the cold does not exceed 15°, it proves excitative of action, accelerates it, increases the power of the muscles, and is favorable to the plastic process; but more intense than this, it operates against action, and by the torpor it engenders, against prolonged great speed, as well as against exercises requiring any great suppleness, as, for example, that of the school. Cold, by stimulating the plastic power, diminishes the sensibility and flexibility of the muscular fibre.

Consequently, winter is a fitter season for moderate exercises, though these may be long sustained, than for rapid evolutions.

And so the highly schooled horse will shew less suppleness and less brilliancy during severe cold than at the time when the temperature is mild. We have often made the remark, that horses leaping of their own accord, who ordinarily would clear seven feet in height with astonishing facility, could not perform the same feat in winter, though ridden, not by any learners, but by ourselves.

2. In the spring, the horse requires some management at the time he is changing his coat; though beyond this, this is the season when the animal is most nimble, and best undergoes all sorts of fatigue. Immediately after he has changed his coat he enters on a period wherein all his powers become, as it were, re-

freshed, and his whole organism is put into perfect equilibrium and full vigour, and especially mares, when the œstral season is passed.

3. Summer calls for the more management according as excessive heat, by augmenting muscular sensibility and irritability, the more exhausts horses.

4. But it is in autumn that exercise should be pressed the least. Not that we are therefore to prolong the animal's repose; for, in general, nothing is worse for horses than lengthened stay in their stables; but we ought to slacken their paces. For example, during a cold, humid, or frosty air, we should go less quick than ordinarily. Instead of accomplishing ten miles an hour with our horse, we should do but eight; and the cartman, in place of his ordinary load of 8000 kilogrammes, should content himself with 6000, &c.

Unfortunately for horses, and especially for those of the army, this precaution is far from being regarded. Encampments and reviews take place the moment after harvest is begun, and when winter is approaching. This rule, established no doubt to suit the farmers, tells far too much against the troop horses, and contributes not a little to the diseases which annually prove fatal to many of them.

[To be continued.]

THE VETERINARIAN, JANUARY 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

TWENTY years ago, notwithstanding at that date thirty years had elapsed since Sainbel first transplanted veterinary science into Britain, the veterinary profession in our country remained without a representative journal. This day twenty years THE VETERINARIAN came into existence—to-day, therefore, we enter on the twenty-first year of our journalistic life; an epoch of some importance to us as journalists, and one we purpose signalling by—from the beginning of 1848—commencing a New or THIRD SERIES of our publication. Remembering that THE VETERINARIAN was the first to break the ground of veterinary journalism; remember-

ing the withering coldness, amounting almost to discountenance, it had at its birth to face on one side, while, on another, it had to struggle against direct opposition; and seeing how, despite of all, the journal has thriven and prospered; remembering and beholding all this, we repeat, we cannot but confess we feel *some* satisfaction at having been instrumental in laying the foundation for twenty volumes of matter which, for amount of useful knowledge and valuable information elicited, may vie with any—nay, indeed, *all*—of the veterinary works extant. We say this in no spirit of boast or ostentation—much less with the remotest thought of detracting one iota from the well-earned laurels of individual veterinary authorship. We take little credit to ourselves for it. For our own part, we have been but compilers and arrangers while others have kindly and constantly been furnishing the *materiel*, and from time to time have sent us jewels of practical worth which we have done our best to set off to the greatest advantage.

And in our "we" let us not forget the name—the cherished and long-to-be-remembered and revered name—of YOUATT. Duty and gratitude—to leave out friendship—both whisper us, we owe it to his memory to yield to him whatever merit may be deemed due on the score of Editorship. For fifteen years out of the twenty he laboured long and late, *and alone*, in the cause of this Journal; and to his persevering industry and talent may be attributed the twenty years' prosperous course THE VETERINARIAN has run. By the support of its friends THE VETERINARIAN has achieved so much, and with that support continued it can do the like again.

A "cattle show"—or at least *the* cattle show—appears to have become in these our days a sort of *omnibus* show, a show if not of all, at least for all; for, nowadays, not farmers and graziers, and aristocratic and amateur agriculturists alone pay their annual visit thereto, but men go whose pursuits or callings are as widely different from agriculture as agriculture itself is from watch-making or stay-making: we say stay-making, for even ladies find their way thither, though, to be sure, their number was insignificant compared to that of their lords and masters. Novelty and fashion have, no doubt, had their share in the attractions of the show; but

the novelty of the thing now is pretty well over, and since shillings have come to be found among certain lower orders pretty well as easily as among the upper, even the fashion of it seems to be on the decline. Mountains of living fat are fast forfeiting their temptation for the eye as well as for the stomach, and in proportion as these blubbery monstrosities subside, we find—in this year's show in particular, and we are glad to see it—breed and symmetry and character peeping out once again in their native beauty. As much does it disfigure a pure Durham or Devon ox to encumber its body with fat as it would the form of a Venus to swell every admired contour of beauty into an unnatural protuberance: real beauty sits enthroned amid the proportion and harmony of her several constituent members.

Now, this is precisely the point to which we would fain direct the attention of the veterinarian. Pure native breed in all its varieties will first command his observation. He will observe the natural and characteristic feature and form of each species or breed; he will note the more striking differences between one breed and another; he will meditate on the respective advantages and disadvantages thereof. Along with breed he will not omit to take into consideration the country which produced it; and this will prevent him, while eying the different individual specimens as they stand side by side in their stalls, forming in his mind comparisons unfairly disadvantageous to any one in particular that in such a situation, and with such neighbours, may to his eye appear inferior, when, in reality, he is probably quite the reverse. *Of its kind* one is, perhaps, fully as valuable and admirable as the other. The dwarf Scotch ox must not be despised by the side of the imposing Durham; neither must the South Down suffer disparagement because the Leicester sheep is nigh him. Each enjoys his own peculiar happy qualifications; each in his own sphere proves equally serviceable to man.

The pure or original breeds having had their share of survey, the veterinarian will next find himself interested in the legitimate or scientific crosses which have been carried out between them. He will mark the improvements said to have been effected in the "improved" stock; and he will inquire whether such alleged improvements have been accomplished at the loss or expense of any valuable

property the original breeds were in the admitted possession of. The concentration of all that is good and valuable in the same individual is no more attainable in animals by breeding than in human beings by culture of body and mind; what we gain in one respect we too frequently lose in some other, insomuch that it is possible a cross may, so far from having any right to the epithet "improved," more appropriately be designated "altered," or even "degenerated."

A great source of attraction in the show just past—and it is one that has been increasing of late years—was the "implement" department. Mechanics are shedding the same light over the tools used in husbandry as chemistry has for some time been casting into the composition and improvement of soil; and between the two aids, the improved plough on one hand and guano on the other, the farmer is beginning to make some important strides towards an accomplished system of agriculture. Among the implements and machines exhibited in the late show there were several calculated to command the attention and approval of the veterinarian. There was an ingenious and apparently very effective machine for bruising furze, said to be the invention of a female—"Mary Wedlake's Gorse Bruising Machine"—which, from the destruction it operates of all the prickly annoyance which furze, as food, occasions in the act of mastication, cannot fail in parts of the country where furze is readily procurable, and hay and straw and other fodder are dear, to prove in winter time extremely serviceable. The exhibitor's bill declares, that "cattle fed on *furze alone* will thrive well:" adding, that "the coats of horses (so fed) will in four days look more glossy and sleek;" and that cows (thus fed) "will yield more milk and richer." The furze should "be cut at one or two years' growth;" and one man alone can bruise twenty bushels a-day. Had there been machines such as this in the train of the Duke of Wellington's army in the Peninsular campaign, the cavalry would have found their advantage in them; it being notorious that on many occasions the soldier had little provender for his horse save what he could forage from fields and forests. There were several other kinds of ingenious and useful machines and implements; but we have left ourselves no room here for notice of any of them.

THE LATE MR. LISTON.

VETERINARY surgeons will sympathize in the general regret felt through the medical world at the death of this distinguished surgeon. Until last year Mr. Liston was a member of the Board of Veterinary Examiners; from which he only seceded on his appointment as Examiner at the Royal College of Surgeons, his avocations, probably, not admitting of time for both duties. He was an ardent admirer, as well as professed friend, of veterinary science. Unsurpassed as a human anatomist and operator, he was far from wanting in a general knowledge of veterinary matters; his zealous love for medical science in every shape, and his fondness for horses and hunting in particular (a hobby he indulged whenever business permitted and opportunity offered), leading him to prosecute such knowledge. He had more than once dissected the horse. He used to say, the best instrument for that purpose was not an ordinary scalpel, but a good-sized clasp-knife. And his dissections of the horse led to the discovery of a fact which, we believe we may with truth say, was not known—at all events not promulgated—before; and that is, the duplex composition of the *ligamentum nuchæ vel colli*. He demonstrated its separability into two longitudinal halves, saying, he could readily introduce his fingers into the interval between them after dissection had exposed their inter-cellular connexion.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—HOR.

TRAVELS IN WESTERN AFRICA IN 1845 AND 1846, *comprising a Journey from Whydah, through the Kingdom of Dahomey, to Adofoodia, in the Interior.* By JOHN DUNCAN, late of the First Life Guards, and one of the late Niger Expedition. 2 vol. 8vo, pp. 304-314.

IT is a rare occurrence to meet with in a horseman the character of what we should designate a *traveller*. Unless he be—what few real horsemen are—a man of thoughts and feelings opposite and varied from any which an acquaintance with or fondness for horses is apt to engender, travelling into far and distant and uncivilized regions is not apt to accord with his notions of enjoyment; and this

is one—perhaps the chief—reason why so comparatively little is known concerning the horses and cattle of barbarous tribes, such as those inhabiting the wilds of Africa, into which Mr. Duncan has first dared to set the white man's foot.

Nor would one have been led to expect such intrepidity and resolution in Mr. Duncan even after having—as he informs us he has—passed sixteen years of home (not *hard*) service in Her Britannic Majesty's Life Guards: stately prancing day after day, as is the custom of these fine troops, from Hyde Park to the Horse Guards and back, not being exactly the sort of preparation one would recommend for a trip, “ankle deep in dry sand, with the thermometer at 118°,” through the arid plains of Africa. Nevertheless, Mr. Duncan left the Guards to embark in the notable Niger expedition, in which deadly enterprise he was miraculously one of five saved out of three hundred souls who fell victims to the merciless fever of the climate. Even this, however, did not deter him from seeking his fortune once more in the same pestiferous climes. After his return home, and restorement to health, he volunteered his services to the Royal Geographical Society, “to proceed to Africa, and penetrate the Kong Mountains from the West Coast;” a peregrination in the course of which he made observations relating to divers strange and curious facts and incidents connected with the animal creation, of which, on the present occasion, it is our intention to give such account as we opine will most interest and best please our several readers.

At Cape Coast, the landing port of our adventurer, where he sojourned five months, waiting for the most favourable season for travelling, and while there undergoing his “seasoning fever”—a seasoning his unfortunate servant did not survive—he found “agriculture had made little progress, probably owing to want of horses, which cannot live more than a few weeks, and from the indolence of the natives.”—“The breed of cattle here is very handsome, though small; but it might be greatly improved, and this would repay the expense very well, as the price of meat is so extremely high.”

ENGLISH ACCRA, a British settlement on the Gold Coast, about sixty miles to the eastward of Cape Coast, contains, according to Mr. Duncan's estimate, “about seven thousand inhabitants. Stock of different kinds is abundant; and if any attention were paid to it, it might be wonderfully improved: but the Africans pay no attention either to domestic or wild animals; even the dog and horse, the two most sagacious of all the animal creation, excite in them no interest whatever. If not driven to it, they will suffer a horse to stand for days tied up without food or water. In fact,

in no case do they exhibit any feeling either of regard or affection, to merit even a comparison with any of the lower animals, being also selfish in the extreme, in every point where no traces of education are found."

On a small island, on the opposite side of the Lagoon from Popoe, Mr. Duncan "observed the first cattle he had seen on this part of the coast. They are properly attended to, having proper sheds, and slaves appointed to attend to them. He also saw a very handsome pony here, and in good condition."

The Avoga—a sort of Viceroy of the King of Dahomey's at Whydah—"has in his possession a very fine donkey, as well as pony, which he prizes very much. He seldom rides upon either; and when he does venture, he has always a couple of men to hold him on."

Mr. Duncan met with here, as well as locusts of a different kind from what he had elsewhere seen, the large-winged ant, so well known to African travellers; and he observed in regard to it a peculiarity which had been unnoticed before, and that is, the emission of an effluvium poisonous to that degree that other insects were destroyed by it; a dog made to howl through it who had the ant simply held to his nose, and a horse to resist the odour "with bitter determination." Even Mr. Duncan found himself sick at stomach in the morning after sleeping in a room in which two of these ants had been left alive shut up in a box.

"I have often heard of *oysters growing upon trees*, but would never before give credit to such information. Here (on the banks of the Lagoon), however, I had ocular demonstration of the fact; the roots of the trees (and as high on the stems as the water rises) being covered with thousands of oysters, as well as the bed of the river for several miles. Some of them were of enormous size; but they have not the delicious flavour of the Thames oysters."

"Oxen are not so numerous here (at Cape Coast) as in Whydah, no attention being paid to the breeding; nor are sheep or goats so numerous as in other parts of this country. The Portuguese and Spaniards are the principal parties who hold any stock; consequently the breed of oxen is much inferior in size to those I have observed in many other places on this coast. Sheep and goats are better bred than oxen; but horses are not at all bred here. Some of the Portuguese and Spaniards have small horses, brought from Badagry and Abomey. Neither the ox nor horse is used for agricultural purposes, although the soil is so well calculated for the plough, being very level, and without a stone even of the smallest size. The wild ox is abundant in the bush near this place, as is also a species of deer, both black and red. The head is broader

and thicker, and its legs less graceful than those of the red deer, which is lighter, and very much resembles our small deer in England.

"Swine are very superior in this place, being almost equal to those of England. Wild carnivorous animals abound in the bush in this neighbourhood, particularly the patakoo, or large hyæna, the panther, bush-cat, and small wolf.

"Fowls are plentiful here, and some are very large, owing to the breed being crossed by the large Portuguese fowl, which is brought over from the Brazils by the Portuguese slave-dealers. The Guinea fowl is found here also in great numbers, running wild in the neighbourhood."

Being one morning out with the intention of shooting some pigeons for breakfast, Mr. Duncan observed a flock of monkeys, and shot one. On carrying it home he was told that it was excellent eating, making, when cooked with palm oil and vegetables, excellent soup. At first, he did not relish even tasting the monkey soup: finding, however, that it was lusciously devoured by the natives, and pressed at last much by a hungry stomach himself, he ventured on a little, and found it "very sweet," and such as he should even have "relished," had he not known what it had been.

While at Whydah, to facilitate his excursionary visits to the surrounding parts of the country, Mr. Duncan, by a kind friend, had a horse lent him, to which by his ingenuity he not only fitted a saddle and bridle, and so equipped *à la militaire*, but also shod the animal himself, and made spare shoes besides to take with him when he set out on his journey.

Upon this horse he proceeded to Abomey—the capital town and seat of empire of Dahomey—where he was received with all honours due to an envoy from the Queen of Great Britain, and, along with various other compliments paid him, had to exhibit before the King of Dahomey in the character of an English life-guardsman. His majesty, after inspecting his military equipments and arms, and declaring that "white men knew every thing," desired next that our hero would exhibit before him on horseback, "at the same time ordering two of his principal men to walk by my (his) side, and hold me on. This I did not properly understand at first, not knowing their language; but after retiring a sufficient distance from his majesty, clear of the soldiery, I formed a circle to the right. My two holders signified that I must not form circle to the right, the king alone possessing that privilege; whereupon I counter-marched, and began a sharp trot, urging my two holders to keep out of my way, but all was of no avail. I then halted, and desired my interpreter to tell the king that Englishmen never required holding on their horse. Upon which he seemed surprised, and

told me to do as I thought proper, but begged me rather not to ride for his gratification than run any risk. I again assured him that there was no danger, and put my horse in motion, first at a trot and then a gallop."

"The king then stood up, clapping his hands in approbation. Upon which the whole assembled multitude followed the example, which much terrified my horse. After a few more circles performed, the king desired me to dismount and come beside him and sit down, thanking me for my performance."

It is difficult to say, in reviewing the manners and customs of tribes so uncivilised as those among which Mr. Duncan now found himself; whether superstition or cruelty is the prevailing passion—INSTINCT, as Mr. Couch would call it. Arrived at the mountainous district of Zoglogho in his way up the country, he could not help remarking the "curious," and we may add *cruel*, mode they pursue of transporting their cattle. "They tie the feet of the animal together, and run a long palm pole between the legs, and thus carry the poor animals with their backs downwards, each end of the pole resting on the heads of the carriers. Six men are generally appointed to carry one bullock, who relieve one another in turns. It would seem impossible, to those unacquainted with African cattle, for two men to carry one bullock; but it must be remembered that the African ox is very small in comparison with English oxen."

"The natives have no sympathy or feeling for the lower animals. They throw the animal down when they get tired, with its back on the rough gravel, so that if they have a long journey to perform, the flesh is cut to the bone, and the death of the poor animal, often ensues from such usage."

About Baffo—a town three miles west of Zoglogho—"the cattle are of a superior breed, being very square, and clean on their legs, but very small. Sheep and goats are considerably more numerous than nearer the coast; but no horses are bred in this part of the country, consequently the natives were very timid in approaching my animal."

As might have been anticipated, we think, at the outset, Mr. Duncan had in the course of his journey to replace a cast shoe. This he found a "difficult task;" since he had no "proper nails"; and he found the hoofs of the African horse "so hard that a nail could scarcely be driven without the assistance of a brad-awl." "Fortunately, however," adds Mr. Duncan, "I had a few common nails, and a shoemaker's hammer, so that by beating the nails a little thinner, and using the awl, I managed to fix the shoe, and prepared for my journey back to Baffo."

Seven miles northward of Aliwaba, Mr. Duncan and his party

passed a small kroom (village) in a country where, among other sources of industry and emolument, iron is manufactured, and stirrups, "similar to those used by the Moors in the neighbourhood of Tangiers and El-Arish. Bits for horses' bridles are also manufactured here of a very severe description, the cross-bar or mouth-piece having in its centre a ring large enough to allow the horse's under-jaw to pass easily through it: this ring, of course, acts both as bit and curb, but is very likely to break the horse's jaw, which is very frequently the case in the Fellattah country."

Still proceeding on his journey northward, ten miles farther, "we arrived," continues Mr. Duncan, "at a kroom of about four hundred inhabitants. Here we saw a large number of horses of a small description. They much resembled our Hampshire foresters in shape, though a little finer breed. They were sold in this market at the rate of four heads of cowries, equal to four Spanish dollars on the west coast of Africa, but are of much greater value in the interior."

At Kahakano, a town a hundred miles or more northward of Akuaha, "horses here invariably make part of the family, being fastened to a peg driven into the ground or floor, by the hind foot, having only about a foot of rope. The children are often seen playing between the legs of the animal, with which it seems much pleased, often nibbling at their heads with its lips, or licking their faces, as a spaniel would."

At Kallakandi, fifty miles farther up the country, "slaves were exposed in the outer market in great numbers, and early in the morning considerable numbers had changed owners. Sheep, goats, and oxen, are numerous, and very handsome. Horses are handsome also, but small, few exceeding thirteen hands high."

We shall conclude with Mr. Duncan's account of a poisonous plant growing at the foot of the Dassa Mountains, whose virulency is such that its juice coming in contact with the eye causes instant blindness, and, when absorbed into the system, immediate death; thus exceeding in activity even the woorara poison.

"The Annagoos of the Dassa mountains are considered dangerous enemies, although by no means distinguished for their valour or gallantry, but on account of their superior skill in the manufacture of different poisons. Perhaps the opinion entertained of these people may arise from superstition; but it is certain that a plant from which the strongest poison is extracted grows in abundance at the base of these mountains, and that with this the poison for their arrows is prepared. This plant grows about eight feet high, has a round stem about the thickness of a man's thigh, and is of a greenish grey colour. Its stems are fluted triangularly, and shoot from the main trunk at regular intervals. The stems or

major branches also send forth minor ones, bearing a resemblance and proportion to the horns of a species of deer or antelope abundant in this country. It is of the cactus tribe, and the whole is of a fleshy nature, but quite smooth and without prickles, growing almost without soil on the bare surface of the granite rock, and receiving nourishment from its long fleshy roots, which run in different directions, till they find some narrow fracture or crevice, into which they insert themselves. Their growth is very rapid.

"I had been cautioned by my Dahoman caboceer, early in the morning previous to our marching, not to touch either a flower or a shrub of any description, or even pick up a pebble, as I had been in the habit of doing when I observed any thing new on my journey. I took little heed of this wholesome injunction, supposing that his motives were merely to prevent any delay on the road, as the day was likely to be rainy. Upon observing a succession of this plant as I rode along, I carelessly laid hold of and broke off a portion of one which was extremely brittle. A yell was instantly raised amongst my soldiers, and in a moment it was snatched out of my hand, and thrown a considerable distance from the path, while another soldier seized my horse's head, and pulled it on one side from the plant.

"Upon inquiring the cause of such an unceremonious proceeding, I was assured that I had run into extreme danger myself, as well as all those near my person, as this plant was the most deadly poison to be found in that country, and that even the vapour from a fracture or wound in the stem or any other part of it, from which a milky liquid almost in a stream exudes, which comes in contact with the eye, invariably causes total blindness, and death immediately any particle of the juice comes in contact with the blood. Be this as it may, I certainly observed in Logazohy and some neighbouring krooms an extraordinary number of blind persons, as well as blind dogs, which naturally excited my curiosity. I thought that this was occasioned by the ravages of the small-pox; but I observed that many were totally blind where no signs of small-pox were visible (though this disease is very prevalent here as well as in all the neighbouring kingdoms to the north and east of these mountains); but, upon inquiry, I found that the blindness was attributed to coming in contact with this plant.

"After my return to Whydah," adds Mr. Duncan in a note, "I happened to mention this circumstance to a Portuguese slave-merchant, at the same time doubting the truth of the powers of this plant. He assured me of the correctness of this information, and that the same plant is to be found in the Brazils."

MISCELLANEA.

THE MORAL CHARACTER OF THE MONKEY.

A GENTLEMAN whose premises were infested by a large breed of sparrows, said they were *birds of no principle*. Of all monkeys it may be said, with much more propriety, that they are beasts of no principle, for they have every evil quality, and not one good one. They are saucy and insolent; always making an attempt to bully and terrify people, and biting those first who are most afraid of them. An impertinent curiosity runs through all their actions; they never can let things alone, but must know what is going forward. If a pot or kettle is set on the fire, and the cook turns her back, the monkey whips off the cover to see what she has put into it, even though he cannot get at it without setting his feet on the hot bars of the grate. Mimicking is another of his qualities; whatever he sees men do, he must affect to do the like. He seems to have no rule of his own, and so is ruled by the actions of men or beasts; as weak people follow the fashion of the world, whether it be good or bad. No monkey has any sense of gratitude, but takes his victuals with a snatch, and then grins in the face of the person who gives it him, lest he should take it away again; for he supposes that all men will snatch away what they can lay hold of, as all monkeys do. Through an invincible selfishness, no monkey considers any individual but himself, as the poor cat found to her cost, when the monkey burned her paws with raking his chestnuts out of the fire. They can never eat in company without quarrelling and plundering one another. Every monkey delights in mischief, and cannot help doing it when it is in his power. If any thing he takes hold of can be broken or spoiled, he is sure to find the way of doing it; and he chatters with pleasure when he hears the noise of a china vessel smashed to pieces on the pavement. If he takes up a bottle of ink, he empties it on the floor. He unfolds all your papers and scatters them about the room, and what he cannot undo he tears to pieces; and it is wonderful to see how much of his work he will do in a few minutes, when he happens to get loose.—*Sharpe's London Magazine.*

THE DOMESTIC FOWL.

THE game fowl is one of the most gracefully formed and most beautifully coloured of our domestic breeds of poultry; and in its form, aspect, and that extraordinary courage which characterizes its natural disposition, exhibits all that either the naturalist or the sportsman would at once recognise as the beau ideal of *high blood*;

embodying, in short, in its individual person, all the most indubitable characteristics of gallinaceous aristocracy.

We do not possess any very satisfactory record of the original country of the game fowl; but I am disposed to cede that honour to India, the natives of which have always been remarkable for their love of cock-fighting; and we also know that there still exists in India an original variety of game cock, very similar to our own, but inferior in point of size. As to the date or occasion of their first introduction into the British islands, we know nothing certain; but I think it probable that we owe it to the invasion of Julius Cæsar, the Romans having been very fond of the sport of cock-fighting. Some have asserted the existence of the breed amongst us prior to the above era; but they can adduce no proof of their assertion, and both probability and plausibility are against *their* opinion, and in favour of *mine**

The earliest record of cock-fighting in England is in the time of Fitzstephen, who wrote the life of Thomas à Becket, in the reign of Henry II, about A.D. 1100.

The game fowl is somewhat inferior in size to other breeds, and in his shape he approximates more closely to the elegance and lightness of form usually characteristic of a pure and uncontaminated race. Amongst poultry he is what the Arabian is amongst horses, the high-bred short horn amongst cattle, and the fleet greyhound amongst the canine race.

The flesh of the game fowl is of a beautifully white colour, tender and delicate in the extreme. The hens are excellent layers; and although the eggs are somewhat under the average size, they are not to be surpassed, if indeed equalled, as to excellence of flavour. Such being the character of this variety of fowl, it would, doubtless, be much more extensively cultivated than it is, were it not for the difficulty attending the rearing of the young brood; their pugnacity being such, that a brood is scarcely feathered before at least one-half is killed or blinded by fighting.

Buffon, and other continental writers on natural history, have given this fowl the not unappropriate title of the "English Fowl;" and truly it is in England that the very best specimens of the breed are to be met with. I cannot here avoid mentioning the justly celebrated breed in possession of the Right Honourable the Earl of Derby—a breed that has been preserved in that noble family for many generations, and that has never yet been known to turn tail, notwithstanding the pertinacious adherence of a *white feather* to the pile; a blemish that no breeding has been able to eradicate, but which, notwithstanding the well-known proverbial prejudice to the contrary, has, in this instance, been the never-failing concomitant of courage.

From the Farmer's Herald.

* H. D. Richardson on "The Domestic Fowl."

CUT-STRAW LITTER.

AT a recent weekly council of the Royal Agricultural Society of England, Mr. W. R. Browne laid before the council the report of Mr. Bennett, M.P., and himself on their personal inspection of the plan pursued by Mr. W. Browne on his farm at Winterbourne-Stoke, in reference to the cutting of straw and the employment of it as litter for his stock,—agreeably with the request of the council at a former meeting, when Lord Portman called their attention to the subject. It appeared from this report that Mr. Browne had about fifty head of young cattle in stalls, their food, whether green or dry, being cut for them; and that they were all littered daily with cut straw, which effectually absorbs all moisture. The stalls are cleared out every second week, and the manure thus obtained is fit for immediate use. The cattle were found clean and doing well. The straw is cut into pieces of from one to two inches in length, by means of a steam-engine (employed for the general use of the establishment), at an expense of one shilling for each four hundred bushels. The manure, from its short texture, does not interfere with the working of the implements employed on the land; and in the spring may be employed as a top-dressing for wheat, without obstructing the operation of the hoe. It may be applied to turnips with great advantage, after they have been thinned out: it may then be mixed with the soil by the hoe; and in dry seasons, on dry soils, such application of cut straw manure will, they think, be attended with great advantages. Coarse salt is sprinkled occasionally on the manure-heaps, for the purpose of preventing their becoming over-heated.

THE WOLVES OF TYRONE.

IN the mountainous parts of the county Tyrone the inhabitants suffered much from the wolves, and gave from the public fund as much for the head of one of these animals as they would now give for the capture of a notorious robber on the highway. There lived in those days an adventurer, who, alone and unassisted, made it his occupation to destroy these ravagers. The time for attacking them was in the night, and midnight was the best time for doing so, as that was their wonted time for leaving their lair in search of food, when the country was at rest and all was still; then, issuing forth, they fell on their defenceless prey, and the carnage commenced. There was a species of dog for the purpose of hunting them, called the wolf-dog; the animal resembled a rough, stout,

half-bred greyhound, but was much stronger. In the county Tyrone there was then a large space of ground inclosed by a high stone wall, having a gap at each of the opposite extremities, and in this were secured the flocks of the surrounding farmers. Still, secure though this fold was deemed, it was entered by the wolves, and its inmates slaughtered. The neighbouring proprietors having heard of the noted wolf-hunter abovementioned, by name Rory Carragh, sent for him, and offered the usual reward, with some addition, if he would undertake to destroy the two remaining wolves that had committed such devastation. Carragh undertaking the task, took with him two wolf-dogs, and a little boy only twelve years old, the only person who would accompany him, and repaired at the approach of midnight to the fold in question. "Now," said Carragh to the boy, "as the two wolves usually enter the opposite extremities of the sheepfold at the same time, I must leave you and one of the dogs to guard this one while I go to the other. He steals with all the caution of a cat, nor will *you* hear him, but the *dog* will, and positively will give him the first fall: if, therefore, you are not active when he is down to rivet his neck to the ground with this spear, he will rise up and kill you both. So, good night." "I'll do what I can," said the little boy, as he took the spear from the wolf-hunter's hand. The boy immediately threw open the gate of the fold, and took his seat in the inner part, close to the entrance; his faithful companion crouching at his side, and seeming perfectly aware of the dangerous business he was engaged in. The night was very dark and cold, and the poor little boy, being benumbed with the chilly air, was beginning to fall into a kind of sleep, when at that instant the dog with a roar leaped across him, and laid his mortal enemy upon the earth. The boy was roused into double activity by the voice of his companion, and drove the spear through the wolf's neck as he had been directed, at which time Carragh appeared, bearing the head of the other.

EDITORS.

We know no class of the community from whom so much disinterested benevolence and thankless labour are expected as from editors of newspapers. They are expected to feel for every one but themselves; to correct public abuses, and private ones also, without giving offence; to sustain the difficulties of others, without regard to their own; to condemn improper measures of *every one* and *no one* at the same time. They are expected to note every thing that is important or extraordinary; and notwithstanding the diversity of men's opinions, their notice must be calculated to please *every one* and at the same time offend *no one*.—*Dr. Johnson.*

THE LATE DR. HOPE.

THE narrative of this highly-gifted man is most instructive. He came to London proud and self-dependent. He was endowed with intellectual powers of the highest order, and he knew it. He would have little commerce with mankind, for he deemed himself superior to his fellows, and he lived apart in study and abstraction. If he worshipped any thing, it was the *mind* which he discerned in the productions of the learned, and of which he knew himself possessed. In the silence of his retirement he vowed that he would become great in his generation, and that men should acknowledge him for a master and a guide. For years he laboured in obscurity and poverty. He made discoveries in science, but could not promulgate them; for it was necessary to accompany his statements with explanatory diagrams and drawings, and he was not rich enough to secure the assistance of an artist. With his discoveries accomplished, the ardent student, bent only upon winning the race with the competitors whom he saw still far ahead, gave up years to the study of drawing and painting, and, in time, produced with his own hand the designs that were essential to the publication of his work. We believe—but the fact we do not distinctly remember—that he himself engraved them. The proud and ambitious man was famous in a morning. The task that he had set himself was accomplished. Sensible of the power that was in him, he had committed a vow to heaven that he would become famous, and that men should acknowledge his greatness, and the goal was reached. Not yet sufficiently, however, as the doctor deemed. One prize remained to be achieved; that obtained, and his work was done. The first physician must be the chief physician of the principal metropolitan hospital. Dr. Hope announced himself a candidate. An older and more influential practitioner opposed him, but the youthful and devoted follower of science gained the day. Flushed with success, he returned to his home, and bade his wife rejoice, for the promise was fulfilled, the early resolution honestly made good. Wife and husband rejoiced no more. That night the victorious student ruptured a bloodvessel: he languished thenceforward, and soon died.

FOREIGN CATTLE.

AN order from the Board of Customs has lately been issued, in substance similar to the one dated February 1845, directing the collectors and comptrollers of the customs of the several outports

of the kingdom to be made acquainted that information has been officially received of the prevalence of an infectious disorder among sheep in several parts of the continent. They have directed that they will give instructions to the officers under their survey carefully to examine all sheep and cattle which may be imported into their respective ports from the continental states of Europe; and that, in the event of their appearing to be infected with any disorder, they are not to permit them to be landed from the importing vessel without an inspection as to their soundness by some competent person, and to report the circumstances forthwith to the commissioners for their direction. The Lords of the Treasury have, accordingly, through their Secretary, Mr. Trevelyan, with reference to the instructions already conveyed to the Board of Customs on the subject of a certain disease raging among cattle on the continent, desired that the Board would enjoin upon all their officers the greatest attention to the state of the cattle imported; they (the officers) were to be apprised of this communication, and enjoined to a strict attention to the matter, with reference to the previous order of the Government on the subject, taking care not to fail to represent to the Board any matter that should arise fit for their cognizance.

WE understand that the Emperor of Russia has recently forwarded a medal to the Duke of Richmond, as President of the Royal Agricultural Association of England, and in testimony of his Grace's exertions for the promotion and encouragement of agriculture. This fact was made public by J. Ellman, Esq., at the recent annual dinner of the Lewes Farmers' Club.—*Brighton Gazette*.

EXTRAORDINARY FACT.

THERE have lately died some of the sheep on the farm at Whitley Abbey, near this city (Coventry), and seven lambs have been left without the care of their natural parents. It occurred about the same time that a large bitch of the shepherd breed had a litter of whelps, which were immediately taken from her and drowned, and the lambs placed under her care and protection. It is not more extraordinary than true, that the bitch immediately adopted her new charge, and nurses and suckles them with the greatest kindness.—*Coventry Standard*.

THE
VETERINARIAN.

VOL. XXI,
No. 242.

FEBRUARY 1848.

Third Series,
No. 2.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, M.R.C.S. and V.S.

[Continued from vol. xx, p. 673.]

NEUROTOMY.

HAVING shewn what success has attended the performance of neurotomy under favouring, or, to speak more correctly, under fitting and proper circumstances, I should be doing injustice to my reader by setting the operation before him in a light falsely dazzling, were I to withhold from him the recital of occurrences which from their aspect and termination have seemed to warrant others in bringing them forward as so many failures, and facts upon which arguments might be securely grounded against neurotomy. There is no more sure way, in the end, of bringing any new remedy or operation into discredit than that of setting forth all its virtues and good qualities to the entire exclusion of its bad ones: in the long run, failures will be certain to make themselves known, and the result of such disclosures is likely to be, that what at first was thought and said to be perfection itself, is now declared to be good for nothing, or absolutely bad perhaps; it being in the one instance as much unfairly decried as it was in the other unduly extolled. Such has been the case with neurotomy. Its promoters and abettors, some influenced by fame, others by gain, set it forth at the outset in brilliant and shadeless colours, and thus succeeded in raising it to a great height in public estimation; so that, when reverses did come, its fall proved all the greater. Still had it sufficient buoyancy, sufficient real merit, to recover from such sweeping condemnation; and now, once more, is it restored by all reflecting veterinarians to that place in their catalogue of remedies

which it ought to have occupied from the first, and which it is not likely now to suffer displacement from.

THE INSUCCESS OF NEUROTOMY, principally from causes which will be pointed out, may be shewn in various ways. Horses can be brought forward who have experienced no benefit from it; nay, cases can be related in which horses have thrown off their hoofs in consequence of it. The foot deprived of its power of feeling is as liable to receive injury as, perhaps more liable than, one that retains its sensibility. Either from being pricked in shoeing, from picking up a nail in the road, from a wound from a flint stone or a piece of glass lying in the road, or a bruise from the opposite foot, or a festered corn, or some other like cause, the senseless foot receives injury; which, not being as in the natural foot accompanied by pain, continues unheeded by the horse, and probably by his master, and the result is, inflammation and suppuration, it may be to an alarming extent, before any discovery be made of the mischief. Under such circumstances, we cannot, have no right indeed to, feel surprise at purulent matter having under-run the sole and insinuated itself between the laminæ, so as, in the end, to occasion the separation of the hoof from the foot. Is neurotomy to blame in this case? Was the master or groom not called on to pay especial attention to the foot or feet of an animal of which he had caused the nerves of sensation to be cut in two? Would any man of common reason suppose that a foot without feeling could evince pain or lameness from injury the same as a foot with feeling? And would he not consider it his duty, by attention to his horse's feet, to compensate in some measure for the deprivation he had caused him? I know that such occurrences as loss of hoof have arisen from over-work, or from work greater than the foot in the state in which it was operated on was prepared to bear, and that under such circumstances such a melancholy termination has been unavoidable: at the same time, I believe this to be a rare incident when due circumspection has been employed.

TO COMMAND SUCCESS IN NEUROTOMY three considerations require attention:—

1stly. The subject must be fit and proper; in particular, the disease for which neurotomy is performed should be suitable in kind, seat, stage, &c.

2dly. The operation must be skilfully and effectually performed.

3dly. The use that is made of the patient afterwards should not exceed what his altered condition appears to have fitted him for.

The veterinarian who suffers himself to be guided in practice by considerations such as these will have little cause to regret having embarked in the experiment: on the contrary, in the long run, he will find he has thereby restored numbers of horses to work who

were utterly useless, saved many lives from slaughter, and obtained for neurotomy a good name within his circle of practice.

A plain and safe argument wherewith to meet the objections to neurotomy is, simply to ask the question--what the animal is worth, or to what useful purpose he can be put, who happens to be the subject of such an operation. If the horse can be shewn to be still serviceable and valuable, then is he not a *legitimate* subject for the operation. The rule of procedure I laid down when treating on neurotomy in my "Lectures on the Veterinary Art," so long ago as 1823, was to operate on no other but *the incurably lame horse*; and whenever this has been attended to, not only has success been the most brilliant, but indemnification from blame or reproach has been assured.

When first neurotomy was proclaimed as a "cure" for certain descriptions of lameness which all other remedies had failed to remove, persons having lame horses, eager to have them restored to soundness, flocked around veterinary surgeons to have them "unnerved;" such appearing to them no more than an ordinary remedy for an ordinary case. By this the veterinary practitioner was placed in a novel and trying situation. If he refused to operate, he probably lost a customer; and if he did so, he felt that he was performing an operation of magnitude and risk in a case wherein milder and safer means would probably prove more efficacious. One veterinary surgeon in our great metropolis, during the season of *neuroto-mania*, operated on some hundreds of horses, and made thereby somewhere about as many pounds sterling; and the result has been, that, in quarters where "nerving" and "unnerving" were phrases constantly in horse-people's mouths, the operation is now hardly ever heard of, neurotomy having been set down in their minds as a lamentable failure. And certainly, for the rough work, coach and cab and omnibus horses have to go through, for farmers' work, for all business, in fine, wherein so little attention is or can be paid to the feet and legs of horses, that so long as they are able to go at all go they must, neurotomy is altogether unsuited, and from them has been very properly discarded. In situations, however, where scrupulous attention can be given to feet and legs, and where work is not forced or even called for at times that repose may be advisable, neurotomy judiciously practised has proved of very great service in more points of view than the principal one of lameness. For this reason it is to be regretted that it has found so many enemies; though less surprise is excited by this so long as those inimical to it are out of the profession. When men in the veterinary profession set themselves up in hostility against it, we feel anxious to learn the reason of their opposition; and therefore it is that I am now about to make a quotation from a veterinarian of

high standing and talent of our own country, running, I am sorry to say, in words as follows :—" They (the opposers of his opinions and *discoveries* 'on the foot of the horse') have added a barbarity surpassing in refined cruelty even the unsoling or any other cruelty ever proposed by the old farriers, that of nerving the horses' legs when they were not relieved by their injudicious measures, and so destroyed the very fundamental properties of the foot, instead of pursuing the natural and most obvious means of prevention and relief from the evil. Seeing and deeply feeling the very great injury done to the animals, as well as to the public and ourselves, we cannot on such an occasion but express warmly our natural, and we believe just, indignation at such conduct*."

I shall wind up this defence of neurotomy with a paragraph from my own "Lectures," published, now, four-and-twenty years ago :—" The incurably lame and useless horse is him alone for whom I recommend it (neurotomy): my object being to render an animal serviceable during the remainder of his life, who, otherwise, must have been given up as utterly valueless for slaughter. No one who has given the subject of neurotomy the least reflection can imagine that the operation was ever intended to supersede other remedies. The very nature of it is such that, as a dernier resource, it is applicable only to a desperate and hopeless case; and if it succeed in restoring one of this description, it is of more value and consideration to us than if it were only applicable to such as we can relieve by other and simpler means. In conclusion, let me remark, that I do not recommend such horses being raced, hunted, or put to any other (like) extraordinary exertions. They may be driven in harness, and are more especially qualified for four-wheeled carriages or for leaders in others: in short, for situations where no weight is incumbent on the fore feet.

"In this point of view—its objects being thus circumscribed—I dare prophecy that neurotomy will be known as long as the veterinary art. It has hitherto stood the test of this capricious age, and weathered out the storm of discordant opinion; it has ranked high in the estimation of its enthusiastic admirers; it has fallen into discredit and comparative dread with those who have misapplied it; it has now but to rise to a certain point in the scale of veterinary surgery, where it will remain despite of all future controversy."

THE ELECTION OF THE SUBJECT FOR NEUROTOMY it is upon which mainly depends the success of the operation. The operation itself is simple and easy of performance; but, however well performed, cannot avail in a subject unhappily chosen for it, or devoted

* "The Foot of the Horse." By Bracy Clark, p. 56.

to it at an improper time. It is therefore a duty the operator owes to himself, as well as to his employer, to ascertain the fitness in all respects of the animal brought to him for operation; nor should he suffer himself to be prevailed upon to undertake it, unless in his own mind this fitness both of subject and disease be clearly made out. It is the swerving from this plain rule of direction which has too often brought both operation and operator into disrepute.

THE INCURABLY LAME HORSE is the *especial* subject for neurotomy, and, above all other descriptions of lameness, that arising from chronic and permanent and irremediable navicularthritic disease is that which holds out the best promise of success from the performance of such an operation. But a horse may be lame from this cause in one foot, or in both feet. So long as lameness is confined to one foot, though that lameness be severe and unrelievable, still may the animal be able to perform a certain amount or kind of work; and whether it be advisable or not to neurotomize such a horse—supposing he be fitted in other respects for the operation—is a question that will best be determined by consulting with his master as to the amount or kind of work he is still able to undergo, and the pain he appears to suffer in undergoing it, or in the stable after his work is done. A humane master will feel for the pain his servant experiences not only at work but during rest; nor will he hesitate to submit his horse, under such circumstances, to neurotomy, although the division of the nerve be, for a moment—but only for a moment—exquisitely more painful than the lameness itself.

With a horse, however, lame from the consequences of navicularthritic disease in *both* (fore) feet—confirmedly *groggy*, as the phrase goes—the choice does not lie between still able to work and neurotomy, but between neurotomy and the slaughter-house; for the inveterate groggy horse is absolutely worth for work next to nothing, while the pain many such poor beasts unremittingly endure wears them down in condition to that degree that their constitution gives way as well as their legs and feet. And, therefore, I repeat, nothing can save such horses from slaughter but the hand of the neurotometist; nor will that avail them at such times as other grave morbid changes have supervened upon those in the navicular joint, or where age has added decrepitude to lameness.

In neither case—neither in one nor both navicularthritic feet—will the judicious veterinary practitioner operate at a time when inflammatory action is detectible in the feet. It is a rule with surgeons, never, if it be possible to avoid so doing, to cut into an inflamed part; and veterinary surgeons should make it their rule, in the performance of neurotomy, to postpone the operation when inflammation is present, until such time as, by suitable means, such

inflammation has been either altogether got rid of, or else sufficiently abated—by, in the case of the foot, taking blood from the toe, if that be necessary, and by hot or cold applications, poultices, &c. and physic, as the case may appear to require. In chronic cases, where blood-letting is not called for, standing in clay for so many hours a-day will prove an excellent refrigerent.

In regard to disease of the navicular joint, there is another stage of it besides the inflammatory in which neurotomy is not to be performed, and that is the acute or active ulcerative condition of the articular surfaces. It must be evident to the smallest reflection that motion of the joint and pressure upon surfaces in such a condition cannot fail to be productive of the worst consequences: ulceration, aggravated by such abuse, will proceed with that redoubled speed and malignancy, that, the union of the flexor perforans tendon with the navicular bone being the especial seat of it, we need feel no surprise at rupture of tendon and dislocation of bone, and consequent breaking down of the horse. But, how is this ulcerated state of joint to be foretold?—how are we to know for certain that it exists? The best indications of its presence to my mind are an inflammatory condition of foot—for *acute* ulceration does not exist without inflammation, causing extreme soreness of tread: there is, with the excessive lameness present, a shrinking from, a sort of dread of, throwing the weight of the body upon the fore feet, and this is accompanied by the expression of great pain in the stable. In such a case as this, means should be used to disperse the inflammation, and absolute rest should be strictly enjoined, with the view of, if possible, in the absence of motion of the joint, inducing granulative action in the exulcerated parts. Nor should any operation be undertaken until the hoofs had become cool, and the soreness of tread had greatly abated.

THE HORSE LAME FROM THE EFFECTS OF LAMINITIS, whose soles are so sunk that they give evidence of depression of the coffin bone, is not a fit subject for neurotomy. With (fore) feet in the condition his are, we may work some good by pressure upon the soles to the extent that the animal can bear it; but, to deprive them of sensibility, and to induce the horse to use them the same as he would sound feet, would be certain destruction of them. After laminitis, when the sole is sunk across its middle, just anterior to the toe of the frog, the coffin bone is actually resting upon the sole, creating the force which causes the latter to bilge; and what we are desirous of doing is, to take the weight off the sole from above, while we augment the force of pressure upon it from below. Neurotomy would defeat this object; and besides that, would force the coffin bone actually through the sole, and so prove the occasion of total destruction to the orgasm of the foot.

There is, however, a kind of laminitis which we may call chronic or sub-acute, wherein the coffin bones are not at all or but little displaced, and consequently the soles not sunk; and this disease, from a repetition of attacks, will now and then end in producing grogginess. To neurotomy in cases of this description there is no objection: on the contrary, when such a subject is too lame to work neurotomy is recommendable.

IN OSSIFICATION OF THE CARTILAGES, partial or complete ankylosis of the coffin joint or pastern joint, when lameness therefrom, as it commonly is, is extreme, and such as to render the horse unworkable, neurotomy will sometimes afford relief by creating a forced use of the ossified parts, and so, in the course of time, through perpetual effort, by degrees, generating motion in them, the consequence of the wearing away (absorption) of such points of the ossification as most, mechanically, oppose it.

FOR RINGBONE neurotomy has been performed with perfect success; although, unless such ringbone interfere with the motion of a joint, and thus become a cause of partial ankylosis, it may be set down in that class of diseases which admit of relief by other and less (to the animal economy) expensive remedies. Ringbones have been distinguished into *high* and *low* according to their situation upon the pastern; the high as well as the low, however, admits of having its sensibility abstracted by neurotomy, the division of the nerves in the former case having to be made either upon or above the fetlock. In vol. iii of THE VETERINARIAN, p. 213, a case is related by Mr. Rickwood, in which neurotomy proved completely successful after blistering and firing had both failed; notwithstanding the work the animal had to perform afterwards was of the most trying nature. Still, I would repeat, that ringbone is not a disease which commonly calls for neurotomy, because relief may generally be afforded by simpler remedies.

"In 1824," says Mr. Rickwood, in vol. iii of THE VETERINARIAN, p. 213, "I operated on a galloway, the property of Mr. John Palmer, of Goldington, in this neighbourhood (Bedford). He went very lame in the near hind leg, in consequence of ringbone. I had frequently fired and blistered, with no good effect. After performing the unnerving operation the horse got up quite sound, and so continues up to this period (1830). He has for some time past been let out as a hack in this town."

In the case which follows, the lameness arising from *high* ringbone became removed by neurotomy:—

Mr. John Tombs, antecedently to his departure for India, operated on a blood filly for "an enormous ringbone upon the off hind pastern." She went exceeding lame, and had been repeatedly blistered, unavailingly. Mr. Tombs "exised a portion of the *meta-*

tarsal nerve," and directed that the wound be treated *secundum artem*. The reason why he divided the nerve *above* its bifurcation was, that he was debarred from doing so below by the enormity of the exostosis. Mr. Tombs did not learn the result of the operation until his return to England (in 1831); when he was informed that the lameness had vanished three days after the operation, and that the mare had, since, run three races, and had been sold. And that at the (then) present time she was doing sharp work, free entirely from lameness.—VETERINARIAN, vol. iv, p. 542-3.

The next case will shew that, when ringbone prevails on one side, or is confined thereto, only the nerve on that side need be operated on.

In July 1836, Mr. Morris, V.S., Bideford, Devonshire, was requested by C. Radley, Esq., surgeon, of Newton Abbot, to look at a lame mare of his. She was four years old, and had two ringbones, one upon the near fore leg, the other upon the near hind. The exostosis first appeared when she was a twelvemonth old. (Does not this fact, along with many analogous ones, militate in favour of the *hereditary* nature of ringbone?) She had been several times fired and blistered in both her (ringboned) legs by a farrier previously to Mr. Morris coming to reside at Bideford. She was (now) lame only in the near fore leg. "Having attentively examined her," continues Mr. Morris, "I was convinced that the seat of lameness was confined to the outer side of the pastern. I recommended that she be nerved, to which the owner assented. Having prepared her, on the 6th July I performed the operation on the outer side only. The wound soon healed, and a month after, I had the pleasure of seeing her trot and gallop perfectly sound. Mr. Radley rides her, when visiting his patients, upon all kinds of roads, and says 'she never stumbles,' and that he prefers riding her to either of his horses."—VETERINARIAN, vol. x, p. 201.

FOR CONTRACTED HOOFS, viewing them in the light of idiopathic disease, or as being the immediate cause of the existing lameness, in the uninflamed condition of the foot, and when consequential changes of its orgasm have taken place which bid defiance to therapeutic measures, neurotomy is a warrantable resource. Indeed, regarding the contraction as *mechanically* occasioning lameness by the pressure of the sides or heels of the hoof upon the sides or sensible parts of the foot, the freedom and boldness which neurotomy will encourage in the tread is calculated to prove of effect in expanding the hoof, and so removing the assumed cause of the lameness: not that this is of much consequence so long as the foot remains devoid of feeling; but that it may tell remotely to its advantage, supposing the foot after a time to recover its sensibility.

There have been many instances of horses that have been neurotized on account of lameness continuing to go sound, even after the demonstrated return of feeling in consequence of the re-union of the nervous trunks, and the case of contraction in question may be classed among such permanent restorations. The annexed case affords a good example of the result of severing the nerves in contraction:—

In November 1828, a black mare, the property of Mr. Buss, of the George-inn, Bedford, went extremely lame from contraction in both fore feet. She could not, from pain, bear to stand up in her stable even sufficiently long to take her requisite food. Mr. Rickwood operated on her, confining his operation to one nerve in each leg. When the wounds were healed she was taken back to work, and proved as useful as any sound horse; continuing now to stand the same time as other horses, and doing her work as well.—VETERINARIAN, vol. iii, p. 213.

THE PRECEDING CASES will suffice to shew, that, for lameness in the foot, coronet, or pastern, incurable or unrelievable by therapeutic means; for navicularthrititis and its consequences; for the effects of chronic coronitis and laminitis, barring sunk soles; for ossified cartilages, for ringbone, for contraction, the operation of neurotomy is especially applicable, and to such has been for the most part confined. Nor will those practitioners who regard their own credit, or that of the operation, feel desirous of extending much, for lameness at least, its sphere of operation. In no part of the body do we possess equal power over the nerves supplying sensation as we do over the—isolated or rather peninsulated—foot. Two nervous trunks, one running on either side of the pastern, form the sole communication between it and the brain, and these trunks take subcutaneous courses, wherein they are readily accessible to the knife. Most other parts and organs of the body derive their nerves from various surrounding sources, from below as well as from above them; hence the difficulty, next to impossibility, indeed, in some instances, of cutting off nervous communication. This circumstance, taken into account with one other, viz. the frequently varied and extensive seat of the disease, will account for the failures that have attended attempts to restore spavined horses to soundness through neurotomy. I do not mean to say that such experiments have not at times succeeded, or that they may not succeed again, when the spavined case be proved to be *isolated*, to consist in uncomplicated exostosis; though this last is a case wherein neurotomy is seldom called for. Furthermore, it must be remembered, that, in operating on nerves running to *muscles* as well as to other parts, we are dividing *motor* as well as sensitive fibres; and that thereby not sensation alone is destroyed, but motion likewise, leaving the part to which the divided nerve is running destitute of motion as well as sensation: therefore it is that neu-

rotomy, as a remedy for removing pain only, is not applicable when the seat of pain or lameness is above the knee or hock. Nor, I may add, has neurotomy been found any other but injurious in what go by the name of *back sinew cases*; and for the twofold reason, of the difficulty there is in *completely* cutting off sensation, and of the liability that still must exist in every deranged or diseased tendon or theca to what we familiarly call "break down" afresh under the continued operation of weight and extraordinary muscular force.

NEUROTOMY HAS OTHER OBJECTS besides the removal of lameness. In effecting the immediate and total abstraction of pain and irritation, it has rendered marked service in cases of altogether a different nature from lameness, as well as of entirely opposite nature, one to another.

Both the æstral and generative functions have become restored through neurotomy. Brood mares that have proved barren in consequence of painful lameness annihilating in them all sexual desire, and that have ceased to have at the usual season any return of the æstrum, have, from losing such pain, had their natural generative functions restored, and become again good breeders.

"In 1822," writes Mr. Rickwood, in *THE VETERINARIAN*, vol. iii, p. 213, "a chestnut cart mare at Oakley, the property of the Marquis of Tavistock, went very lame in the near foot behind, in consequence of complete ossification of the lateral cartilages and extensive ossific disease around the coronet. She scarcely ever placed the foot upon the ground, but generally moved on three legs. Her sufferings prevented the periodical æstrum. She had not bred for years. About two months after the operation she went to work, and moved sound. She has bred several healthy foals, and works as usual."

TRAUMATIC TETANUS HAS HAD ITS COURSE ARRESTED BY NEUROTOMY. In a paper "on Tetanus," read by Mr. Henderson, V.S. to the Queen Dowager, before the Veterinary Medical Society, in the year 1832, that gentleman says—"I have known a case (of tetanus), produced by a wound in the foot, cured by the operation of neurotomy; I have also known the same treatment in other cases fail. So, likewise, in tetanus arising from docking, horses have recovered, in consequence of the diseased part being amputated (which, in fact, is nothing but neurotomy); in other cases of the kind the same has failed."—"I particularly recollect," adds Mr. Henderson, "having examined one case where I found the spinal nerves very vascular, and the intestines bordering on inflammation; and such appearances naturally lead me to a belief, that, unless an operation can be performed *in a very early stage* of the complaint, we have but little chance of success."—*VETERINARIAN*, vol. v, p. 67.

[To be continued.]

CONTRIBUTIONS TO ZOOLOGICAL PATHOLOGY.

[From the *Annales de Chemie et de Physique*, vol. 82, anno 1843.]

Translated by JAMES MERCER, *M.D., F.R.C.S.E., Lecturer on Anatomy, Edinburgh.*

*Part * * On the "Verminous Alterations" of the Blood of the Dog, as determined by the great number of "HEMATOZAIRES" of the Genus FILARIA, by MM. GRUBY and DELAFOND.*

PHYSIOLOGISTS and anatomists have for a long time stated, undeniedly, that the presence of certain entozairs in the nourishing fluids of animals depended on the cold state of the blood, as found in frogs and fishes. In the mammiferous animals the same filaments have sometimes been found in the course of the circulation of their blood; but it is very probable that these filaments got into the circulation after having perforated the structures of those organs where they had been developed. It is, then, a point of great importance to physiology, pathology, and natural history, to demonstrate not only the existence of circulating entozaria in the course of the blood, but also to prove their constant presence in that fluid in those animals which come near in structure to that of man. But as science does not possess, at the present time, a demonstrative example of the exact manner of the circulation of these filaments in the blood of the mammifera, we shall, shortly, give that part to the Académie of the discovery which we have made of those "entozaires" that are found circulating in the blood of a dog of a vigorous constitution, and apparently in a good state of health.

These *filaments* were of a diameter from 0.003 millimetre to 0.005 millimetre. The body is transparent, and without any colour. The anterior extremity is obtuse, and the posterior, or caudal, is terminated in a very slender filament. Towards the anterior part we observed a small hair-like furrow, of length about 0.0005 millimetre, which might perhaps be considered as a buccal fissure.

From all these characters, this species of "hematozaria" attaches itself to the genus "*Filaria*."

The movements of these animals are very vivid, their vitality even persisting for ten days after the blood has been drawn from the bloodvessels, and received into a vessel placed in a temperature of 15 centigrades. On examining a drop of this blood under

the lens of the microscope, we see these "*hematozaria*" floating in an undulatory manner amongst the blood globules, curving and uncurving themselves, and twisting and untwisting again, with great vivacity.

To satisfy ourselves that these filaments existed in the whole current of the circulation, we have examined the blood of the coccygeal arteries, the external jugulars, the capillaries of the conjunctiva, of the buccal mucous membrane, of the skin, and of the muscles; and in everywhere, in these structures, we were presented with these "entozoaires." Within twenty days we examined daily the capillaries of different parts of the skin, and the buccal mucous membrane; and, without exception, there were constantly present many of these animals. The urine and excrementitious matters did not contain any of them.

The diameter of the blood globules of the dog is from 0.007 millimetre to 0.008 millimetre, whilst that of the hematoic entozoa is from 0.003 millimetre to 0.005 millimetre; there cannot, therefore, be the smallest doubt but that the small filaments circulate with the blood wherever it passes. We estimate from many researches, made to assure us of the quantity of blood existing in the vessels of dogs of middling size; and where the dog was so treated, it yielded 1 kil. 500 gr. of blood from its circulation. But one drop of this blood, weighing 0 kil. 067 gr., afforded, regularly and ordinarily, from four to five of the entozaria: the dog, therefore, would have more than 100,000 of these filaria in its entire circulation. This prodigious number of these animals cannot but astonish us that the dog can still possess good health; nevertheless, we must remark, that the entozaria of its digestive tube, the *tænia*, are also in great numbers, and with rarely any derangement of the vital functions. For twelve months we have examined the blood in seventy or eighty dogs, without meeting with the hematozaria; and, to date from our discovery, we have searched, but in vain, in the blood of fifteen dogs.

At the present time we have the honour of laying before the Members of the Académie,—

1. A drawing of the filaria of the blood of the dog;
2. Of the blood containing the living entozoa;
3. The dog in which the blood is verminous; and we offer, if the Académie desire, to make an incision into the upper lip of the animal, and shew, by the microscope, the circulation of the filaria in its blood.

Edinburgh, Jan. 5, 1848.

MR. T. W. MAYER TO MR. PERCIVALL, ON THE DISCOVERY OF NEUROTOMY.

My dear Mr. Editor,

Newcastle, Jan. 12, 1848.

IN your excellent paper on Neurotomy, which appeared in the December number of your Journal, you state that the "introduction of neurotomy into veterinary medicine is comparatively of modern date. For years before the division of nerves had been practised by human surgeons, in particular for the relief of that most painful of all painful affections, *tic dolooureux* ; but there is no mention of any application of the operation in veterinary surgery prior to the time of Moorcroft," &c.

Without intending to throw any doubt upon the accuracy of this statement, or desiring to enter upon the question as to who was the discoverer of neurotomy for the removal of lameness, I cannot help directing your attention to an insinuation that has been made, "that neurotomy is not a modern discovery," and a brief consideration of the grounds upon which that opinion is given.

You are doubtless aware that, in many of our old writers, an operation, which they called taking up the veins, was very much praised in certain diseases of the feet and hock ; in fact, I believe that the operation is now sometimes performed by the old farriers for what is called bog spavins. It is upon this practice of taking up the veins, or, as the French call it, barring the veins, that a foundation is sought for the truth of the remark that neurotomy was not unknown to the ancients.

In a little work, intituled "The Art of Shoeing Horses," by the *Sieur de Solleysel*, to which are added Notes on his Practice, by *Frederick Clifford Cherry*, Principal Veterinary Surgeon, the operation of barring the veins is thus described in chapter IV, which treats of flat feet, and such as have their soles round and high :—

. . . . "Above all things, if your horse has flat feet, you should bar the pastern veins. This operation, however, is not absolutely necessary, unless your horse has his soles round and high ; yet this is not to say but that the doing of it contributes very much to the amendment of flat feet. To do it, you must know that in the pastern there are two veins below the joint, the one upon the inside, and the other upon the out ; which veins must be barred, that so you may put a stop to the superfluous humour which falls down upon the lower part of the foot, which, through time, makes the foot become round and high at the sole.

"To bar the pastern veins right, you must tie them near the

joint with a firm thread, to the end that you retard not their cure; a little silk is very good for that purpose; then cut the vein beneath, and let it bleed: if it bleed too long, you may bind up the orifice with a large band and a compress."

Upon this extract Mr. Cherry makes the following note:

"Solleysel, as well as most other old writers, knew but little of minute anatomy; and the directions he gives to 'bar the vein,' seem really to indicate the modern nerve operation, claimed by Sewell as a discovery, and subsequently by Coleman and Moorcroft as a mode of treatment formerly practised by each of them. Although he mentions veins only, it is very evident that the operation was not confined to the vein alone, for in that case the ligature above the cut would be useless; but with the artery included within the ligature, profuse hemorrhage would be prevented, while the moderate bleeding which he seems to allude to would go on from the open orifice of the vein, and also from the lower portion of the artery supplied by anastomising branches, which, though small at first, soon increase in size, and carry on the circulation as freely as before. If, then, this artery was included in what he merely calls the vein, it is hardly possible, and certainly not at all probable, that the nerve was left out."

Whether Solleysel's ignorance of minute anatomy was so great that he could not distinguish the difference between artery and vein, or whether he was of opinion that "*a nerve is a long small bone, with very fine pipes or hollow fibres*, wrapped up in the dura and pia mater, which not only covers them all in common, but also encloses every fibre in particular," I do not think, from the meagre account he has given us of this operation, that we can safely arrive at the conclusion that he included both nerve, artery, and vein in his ligature. Let us refer, for a few moments, to the testimony of one of the old writers alluded to by Mr. Cherry in his note.

The evidence I shall produce is our earliest English author, Blundeville, who flourished more than a century before Solleysel; and I would especially direct the attention of Mr. Cherry to a perusal of that part of his work which treats on the true "*Arte of Paring and Shooying all maner of Horses*;" for this simple reason, that he will there find, briefly and quaintly expressed, all those leading principles which are to be found in Solleysel's work, in which, and Mr. Osmer's, Mr. Cherry has stated, alone "*are to be found all the supposed discoveries, principles, and improved practices of later years, as regards the shoeing of horses*."

After devoting a chapter on "how many veins a horse may be let blood in, and to what end," and after stating how these veins may be found, Blundeville devotes the next chapter to "the order of taking up veins, and wherefore it is good," which he

describes in the following manner :—" First, if the horse be very everst and shrewd, then cast him upon a dounghill or some strawe ; then having found the vayne which you would take up, marke well that part of the skinne which couereth the vayne, and pull that somewhat aside from the vayne with your left thumbe, to the intent you may slitte it with a razor without touching the vayne. And cut no deeper then only through the skinne, and that longol-wise, as the vayne goeth, and not above an inche long. That done, take away your thombe, and the skinne will returne agayne into his place right over the vayne, as it was before. Then with a cornel uncover the vayne and make it bare, and being bare, thrust the cornel underneath it and rayse it up, so as you may put a shoe-maker's threade underneath, somewhat higher than the coronel, to knitte the vayne when the tyme is ; and if your cornel had a hole in the small end thereof to put in the threade it should be the easier done. Then the cornel standing so still, slitte the vayne longol-ways, that it may bleede, and having bled somewhat from above, then knitte it up with a sure knot, somewhat above the slitte, suffering it to bleede only from beneath ; and having bled sufficiently, then knitte up the vein also beneath the slitte with a sure knot, and fill the hole of the vayne with salt, and then heale up the wounde of the skinne with turpentine and hog's grease molten together and laid on with a little flax."

Taking into consideration the state of the veterinary art, and making every allowance for the ignorance that prevailed with regard to the circulation of the blood at this period, 1566, this plain statement of the manner in which this operation ought to be performed is most creditable to the writer. Although a bungling operator might mistake the artery for the vein, slit through nerve and artery, and include them both in the same ligature, it is certainly not likely that he would cut through all three. Therefore the question turns upon this point. In speaking of veins, does Blundeville mean the artery or not? If the artery was the part, it is easy to conceive that the ligature embraced both nerve and artery ; but if he mean only the veins, then I am of opinion that the nerve was not included. From the manner in which he describes the operation, the bleeding from beneath, &c., I am of opinion that the vein was the only part they intended the operation should be performed upon. I do not think, therefore, that we can say or suppose that the nerve operation was known to or designedly performed by the old farriers ; at the same time it is but natural to suppose that the idea was taken from the operation which has just been described. For what so natural a reflection for a scientific mind as this ? If it has been found of benefit in lameness of the feet, &c., to take up the veins, what may not be the result of the divi-

sion of the nerves and the destruction of all sense of pain? That some such idea occurred to the mind of Moorcroft there can be no doubt, for Mr. Blaine has placed it on record. "I well remember (says he) on my first introduction to Mr. Moorcroft, by my old friend Bloxam, at that time residing with him, that a very principal subject of our conversation was, his experiments on the feet, particularly as regarded rendering such as were incurable more serviceable, by making them less sensitive, *which he had before attempted by tying up the pastern arteries, but was now employed in dividing the nerves of the same part.*"

How often has it happened that ignorant and uncultivated minds have been on the eve of the greatest discovery! Totally ignorant of the functions of the nerves, and almost equally ignorant of the circulation of the blood, we find men performing an operation requiring both knowledge and skill for diseased feet; from which, owing to the copious bleeding, the counter-irritation, &c. produced, they experienced oftentimes beneficial results. Yet with such an operation on record, and in practice for upwards of two centuries, since Blundeville's work, it is singular that the idea of the division of the nerves immediately in connexion with the diseased part should never have been thought of until lately. Whatever may be said about its discovery, the honour of having brought so useful an operation into general use remains with one man, and that man is Professor Sewell.

Believe me, my dear Sir,
To remain, your's truly.

CHOKING IN CATTLE.

By JOHN NELSON, *Veterinary Surgeon, Highfield, Sheffield.*

To the Editor of "The Veterinarian."

SIR,—Since the choking season in cattle is again returned, and I have already had many cases, and since the losses every season coming under my own notice are great, occurring from evil practice either on the part of the owner or those to whom the care of them is entrusted, I feel desirous of sending you a few cases, and will afterwards transmit you my treatment in detail.

CASE I.

Jan. 15, 1837.—I was desired by Mr. Joseph Bingham, of Norton Woodsetts, to see a cow. I returned with the messenger, and on examining her I could not discover any thing amiss. The pulse was natural, and every other department appeared so, except

that there appeared a little inflation of the stomach, which seemed to have something in it of a solid kind. I carefully examined her round, and while applying my ear to the front of the thorax, I could distinctly hear eructations of gas from the stomach, apparently obstructed in its passage up the œsophagus. From these symptoms I informed the owner I believed the cow to be choked, and inquired if she had not vomited at times. I was told that she had. I informed him that she had been choked some time. I then ordered her a little hay, with a view of discovering if she would not vomit it up again. She ate it greedily, but in a few minutes vomited it up again. I was then told that she was choked about a month ago, and that Mr. G., a neighbour, had put a choke-rope down her throat; but that ever since she had not done well. I told Mr. B. I would bring my probang in the morning, and see if I could relieve her. Accordingly, the probang was introduced, but could not be made to pass into the stomach, nor even within eight or ten inches thereof, to the best of my judgment. I made many trials, but to no purpose. I then informed Mr. B. that I saw no chance for her to recover; that he had better sell her for slaughter, she being a feeding cow. He consented to that at once. On post-mortem examination, I found, extending from the stomach up the œsophagus, to the extent of about ten inches, a large pocket, containing a ball, weighing twenty-three ounces, and measuring nine inches long by fifteen inches in circumference, composed of hay, straw, turnip-tops, &c.

CASE II.

Feb. 7.—While in the market at Sheffield, I was asked by Mr. Wm. West, Arberthorn, Sheffield Park, what I thought could be amiss with a neighbour's cow (Mr. J. Downing's). He said she had then been about three weeks ill, and nothing that was done to her did her any good. She had had medicine in abundance, and had also been tapped, but for which she could not have survived. I inquired how her ailment first began. He informed me, with swelling in her body, and vomiting. I told him that it was my opinion the cow was either choked or had a stricture in the œsophagus. We parted, and I heard no more of the case until the 28th, when a messenger came, desiring me to go to Mr. J. Downing, Arberthorn, Sheffield Park, to see a cow. I inquired of him what symptoms were present. He answered, she was much swollen in her body, and occasionally vomited. From this description I took with me my probang. To my astonishment, I found it to be the cow which Mr. West had been describing to me three weeks ago; she had been therefore six weeks in this condition. On examining her, I found the symptoms much as in Case 1, except

that she had been tapped, to let out the gas from the rumen, and the orifice was being kept open to allow gas to escape. I introduced my probang down the œsophagus, but found much difficulty when within six or nine inches of the stomach, of passing it: but ultimately I succeeded. I then closed up the orifice in the rumen, and ordered all coarse food to be carefully kept from her, such as hay or straw; also all the bedding to be carefully removed, and that shavings, saw-dust, or other material which she could not possibly eat, be substituted in lieu thereof. I then ordered linseed-dust and water, rather thin for the first four days, and then to be made thicker until the eighth day, when she might have a little hay, chopped, and linseed-dust mixed, leaving word that they let me know if she did not go on right. I then left her, and heard no more of her until the 11th of April, when a messenger came to inform me that she was once more ill. I took my probang, and went to see her. On examination, I soon found that the œsophagus had again become obstructed. I introduced the probang, and removed the obstruction, and ordered the owner to return to the gruel diet again for five or six days, and to let me know if she became ailing again. The orifice in the stomach was now healed up. I gave no medicine either time. I again left her in the hands of the owner, who informed me, some time afterwards, that she did very well from the time I last saw her.

P. S.—I send you a ruptured œsophagus, though one damaged by mice, similar to Case 1, only smaller; the history of which I will furnish you with another time, together with some additional cases, should you think them worth your notice, and shew the cause of those ruptures and their remedy.

Your's truly, &c.

December 12, 1847

*** This communication, but for the absence from home of the Editor, would and ought to have appeared in the January Number.

CONTINUOUS CASES OF CHOKING.

By the same.

CASE III.

On the 6th January, 1843, Mr. Bagshaw, of the Wicker, Sheffield, came to my house at 10 P. M. and desired me to go and see a cow, which he informed me had then been three weeks ill. I inquired of him what symptoms she exhibited. When he informed me, she was almost constantly *risen on*, that is, inflation of the rumen, and

frequently vomited. She would eat greedily; but would soon afterwards reject what she had eaten. I informed Mr. B. that it was my opinion the cow was choked at the lower part of the throat, or else had a stricture there. I took my probang, and went on with him to see her, and found the symptoms as described. There was much inflation of the rumen, and on giving her a little food, she soon vomited it up again; and there was a quantity of rejected food underneath her head. I applied my ear to her side, in the region of the lower part of the throat, and to the front of the thorax, and I could distinctly hear discharges of gas pass by the obstructed body in the throat. I informed Mr. B. that the cow was choked. He could not, however, believe that a cow could be choked for three weeks. I endeavoured to convince him to the contrary; but he still held to his opinion. I told him that, if a pocket had not formed in her throat, I would convince him in a few minutes she was choked, by affording her relief. I then introduced my probang down the throat, and ascertained that she was choked within a few inches of her stomach. In the course of about three minutes, by gentle pressure with the probang, she was perfectly relieved. The rumen expelled its gas, and she returned to her natural appearance. I then ordered all litter and hay or straw to be carefully removed out of her reach, and that she be confined to gruel diet; and left word I would see her on the following day, the 7th. Being busy, however, that day, I did not see my patient. But Mr. B. came to my house, and informed me the cow appeared well: and added, she would pull down the boothstake (the part she was tied to) unless she were allowed to have something more to eat. I told him she was doing quite well, and I would see her in the morning.

8th.—Doing well; taking her gruel herself; ruminating, and desiring solid food. Ordered gruel diet to be continued until I saw her again. With this Mr. B. was dissatisfied, and pressed me to give her some medicine, and allow her to have solid food. I informed him that the part of the throat where she had been choked was dilated, and that the muscles thereof had lost their power of contraction to a very great extent, and that I had more confidence in nature righting herself, if he would only feed her as directed, than in any medicine that could be given; and further, that if he gave her solid food before the muscles of the throat had regained their tone, she would be again choked in the same place, and that the external muscular fibres thereabouts would be ruptured, and the case become incurable. “Well, then,” said he, “shall I give her a pint of linseed oil?” I told him he could please himself about that, as it would neither do her good nor harm. I then left him, quite dissatisfied with my orders and judgment as to the real disorder.

9th.—On going to see my patient, I was informed by Mr. B. that he had applied to another person, who had told him the cow was not choked, and that he could cure her in a few days: he had allowed her solid food, &c. “Very well,” said I, and left him.

10th.—A messenger came to my house and informed me I was to go and see Mr. B.’s cow again, that the committee (for the cow was in a club) wished me to examine her, and report what I thought of her. I took my probang and went to see her, and found her much in the same state she was in a month ago, excepting the rumen was not inflated to the same extent, and the probang passed much easier down the throat, appearing, however, to perforate a yielding mass at the part affected. From these symptoms, I informed the member of the club, my opinion was that the external muscles of the throat had ruptured, and there was a pocket formed in it; that no means could remedy it, and that the cow had better at once be slaughtered. To this he consented, and she was driven away immediately. On examination after death, the muscular fibres of the œsophagus at its lower part, to the extent, from the cardiac orifice, of about ten inches up the tube, on the lower side, had become completely ruptured. The cuticular coat was dilated through the rupture to nearly the same extent, and had become transparent from extension, forming a pocket capable of holding three pints of fluid, though empty at the time from the probang having passed through it. No other part shewed any sign of disease.

CASE IV.

Dec. 6th, 1842, Mr. Robert Wright, of Cherry-tree-hill, sent a messenger, desiring me to go to a cow that was choked. I took my probang, and proceeded towards the place; but had not gone far when I met another messenger, who informed me she was better, and I need not go. From this time to Jan. 18th, 1843, the same took place three times, so that I did not see the cow until that date. The symptoms were much the same as in the foregoing cases. I introduced my probang down the throat, but did not succeed in passing it into the stomach until after repeated trials, in consequence of the presence of an obstruction about six inches above that organ. I told Mr. W. I doubted he had neglected his cow, and feared there was a pocket formed in the throat, which would admit of no cure. I ordered a gruel diet; and that all litter, &c. be taken away from her out of reach during four days; then to give a little mash and hay; and if she did not go on favourably to let me know.

24th.—A messenger arrived, desiring my immediate attendance,

she being again choked. I took my probang, and went to see her, when I found her in much the same condition as before. The probang was again resorted to, and she was relieved. Gruel diet was renewed until the 29th, when she was again allowed mash and hay. No sooner, however, had she eaten it than she commenced shewing symptoms of vomiting. I then informed Mr. W. it was my opinion a pocket had formed in the œsophagus, at its lower end, which would defy all our means of remedy; and therefore she had better be slaughtered. He at once agreed to this, and the next day it was carried into effect.

On post-mortem examination, the lower part of the œsophagus was found ruptured, from the cardiac orifice to the extent you see upwards in the specimen which I send you, and filled with masticated food. Within the rumen were two balls, the size of the one now in the œsophagus, which had been forced there by the probang; though it is not above half the magnitude now as when first taken from the cow, it having from drying become contracted. You will, however, be able to see the nature of the disorder.

[To be continued.]

A CASE OF STABBING WITH A STABLE FORK.

By JOHN YOUNGHUSBAND, V.S., Greystoke.

To the Editor of "The Veterinarian."

Dear Sir,—IN perusing your leading article on the rise and age of THE VETERINARIAN in the January No., it struck me that I had not carried out my intentions with that candour and fervency which I ought to have done, taking into account the favours bestowed upon me through that periodical by its talented Editors. I therefore purpose, as a small mark of respect, to send you a case of a brutal attack committed upon that noble and useful animal the horse by one whom I designate by the name of a vile miscreant in the shape of a human being.

The light of so small a star as mine can only shew itself in the profession as one of the minor class; nevertheless, I will, as far as lies in my power, cause it to shine amidst the more brilliant luminaries of the professional hemisphere, and not, as I am fearful some of the major class do, keep my rays hid under a bushel.

Oct. 24, 1847.—I was called to visit a mare of the Scotch cart breed that had received two severe wounds contiguous to the lower border of the short ribs, and was beginning to shew symptoms of

an aggravated nature, although, up to this time, she was doing her work as usual. To make short work, I bled the mare, gave her some opening medicine, ordered the place to be diligently and regularly fomented, and to have warm emollients applied, and was preparing to leave, when the usual question was put, "How had the wound been produced?" To which I made answer, that it was my firm opinion it had been done by some person, either in his passion or maliciously, and to every appearance with the stable fork, or some such like instrument; since the wounds had evidently been inflicted from behind, they pointing forwards, as indicated by the probe; but from the swelling that had taken place, and the smallness of the wounds, I could not satisfactorily examine them, so I left, this time, desiring to be called again should the symptoms get worse.

26th.—Called again; and upon my arrival at once saw that the mare was near the point of dissolution, and that any remedial means I could use would prove of no avail, and so forbore any further treatment: at the same time desiring to have an opportunity after death to make an examination.

27th.—I received word that the mare was dead, and that, equally to my discomfort, they had made an examination. The wounds were found both to have penetrated quite through the integuments, and to have entered the cavity of the abdomen; and so ended the affair. Now, from the hint thrown out by me respecting the nature of the wounds, the servant man having charge of the mare was immediately suspected. After her death, he was taxed with the deed, which at first he stoutly denied; but my explanation being told him, and likewise he being threatened to be carried before the magistrates, in his simplicity, if so I may call it, he confessed that it was he who did it; and if they would not prosecute, he would forfeit his wages, and leave his place. To which proposal consent was given, the master wisely considering the less he had to do with such a vile hireling the better. This same person was heard to say, he would do his master a private injury before he left. I do not write this paper in the expectation that it will in the least conduce to the merit of *THE VETERINARIAN*, but as a small token of my desire to do all in my humble power to advance that science of which I have laboured hard to attain a little knowledge, and at the same time to shew with what brutal authority man can vent his spleen upon an inferior animal.

I have forborne entering into any particular explanation about treatment, as I consider that a waste of time.

Your well-wisher.

ON WOUNDED AND DIVIDED TENDONS.

By THOS. TURNER,

President of the Royal College of Veterinary Surgeons.

[Continued from Vol. xx, p. 191.]

Dear Mr. Editor,—IN one of your leading articles of the last number of THE VETERINARIAN you have done me an honour by urging the necessity of the attention of the junior veterinarian and student to my paper, published in the same number, on “Wounded and divided Tendons;” I therefore feel it the more imperative that I should embrace the *first* leisure opportunity of adding a few brief remarks touching the *treatment* of these very formidable injuries.

By the way of additional zest, I shall cite an instructive case of my brother's, which occurred in the olden time, since its precepts are applicable at the present day, to the very letter. Nearly thirty years ago, at the height of the gallant hunting career of the late John Maberly, Esq., his most crack hunter was *cut down* under him with one fore leg, during a very rapid burst. He valued his horse at 500 guineas. Notwithstanding only a few weeks before the accident, my brother saw 250 guineas paid down for the said brown gelding to the celebrated “Gowland Lotion Dickinson.”

Previous to the rider dismounting, the horse's *toe was observed in the air*. The wound was at the back of the fetlock, immediately under the tuft of hair—a puncture from a razor-like flint. The very minutiae of this case are worthy of record, because it happened that all manner of circumstances conspired towards the restoration of the wounded steed.

This accident occurred in a wild country, far from shelter; and the squire, perceiving that the patient, in his way home, would have to ascend and descend some terrific hills, exercised his usual acumen by giving a peremptory order to his groom that the horse should not be moved *one yard* from the field he was then in until Mr. Turner arrived, although it might be all the night through. My brother reached the spot within three hours of the receipt of the injury, having carried in his pocket a small mechanical *support*, which led to the perfect restoration of this valuable animal. There is no occasion for a sketch of the crooked piece of iron, since he merely directed his farrier to forge the ordinary high *supporting patten*, provided with two side wings or branches, as if he were about to weld these wings upon the ground surface of a common shoe. This instrument, without a shoe, he took with him. His design was as follows: first, partially to flex the injured leg, *before* an ounce of weight was borne upon the *sinew*; secondly, that he

would avoid the torture of wrenching the injured surfaces of the tendon necessarily attendant upon taking off the shoe (an evil too often before deplored), being provided with two or three small files and drawing knives, he first excavated the horn between the two last nails of the outside quarter, making an aperture between the shoe and the foot corresponding in size with the extremity or side branch of the patten; then, having made a similar breach in the hoof of the inside quarter, between the two case nails, the wings of the *supporter* slipped into each excavation most happily and firmly, while the shoe remained equally secure upon the foot. Compresses of pasteboard and rollers were immediately applied to the leg and arm, and the horse ordered, by short and measured steps, to make the best of his way to his own stable, a distance of several miles.

The case demanded and received long continued *soothing* treatment, absolute quietude, with the strictest antiphlogistic discipline, which was followed up by blistering. Notwithstanding our extreme efforts he remained *lame* for several months, with considerable tumefaction of the flexor tendon. In due time the leg received the *deep cautery lesions*, and about that day twelvemonths, from the receipt of the injury, the horse made his re-appearance in the hunting field, carrying with spirit his master one of the most extraordinary days in the annals of Surrey hunting.

Mr. Maberly's faith in veterinary surgery, even in those embryo days of our veterinary existence as a body, was unbounded: he was the very model of a patron to a really practical man. Had *two* years been required for this case, there would have been no hesitation, no flinching, no evasion of the struggle; and in the event proving a dead failure, not the semblance of a murmur would be either uttered or implied.

This animal remained absolutely *sound* for several successive seasons, known all through the county as the *cut tendon* horse.

As an auxiliary in the treatment of such formidable cases, there can be no doubt of the importance of *slinging* when the chief appliances are at hand; but it having happened to me on so many trying occasions that I have been driven to tax my wits to the utmost to find *substitutes* for such accommodation, at the pressure of the moment, the cause may be further served by a short outline of other expedients. In the worst of these cases, the practitioner is anxious to get his patient into the nearest farm house stable within reach, or even hovel if provided with rack and manger. If turned loose in the box he would be continually getting up and down from pain and irritation: *this I oppose*; by applying a stout leather head collar provided with two strong reins, and securely tying his head to the rack. I should have commenced by

saying, a broad heavy cart collar on his neck; then a cart-horse harness with a strong breeching is procured, from which ropes are extended to each stall-post, also ropes from the neck collar to the rack. With these three points of support I have, in numerous instances, kept the patient on his legs for a fortnight most advantageously, and without any serious amount of wringing.

It will be perceived that, by these homely arrangements, the requirements are only those which every farm-house readily affords.

I am, dear Mr. Editor,

Your's very truly, &c.

Croydon, Jan. 18th, 1848.

REMARKS ON QUEEN'S PLATES.

By WILLIAM GOODWIN, M.R.C.S., Vet. Surgeon to the Queen.

[These remarks have been called forth by the perusal of a printed *brochure* from the pen of Mr. Cherry, Principal Veterinary Surgeon to the Army, wherein it is suggested that the money annually granted for the encouragement of racing, by the support of Queen's Plates, might be devoted with more advantage to the maintenance of a certain number of stallions, for covering eligible mares, the property of farmers and breeders, with a view of restoring a breed of horses (hunters, roadsters, and cavalry horses, able to carry weight) said to be on the decline.]

OF late years, it has become quite fashionable to complain of the sum our Government expends in the shape of King's Plates; and it is to remove an erroneous impression, only imbibed by those who know but little of racing matters, that I take up my pen, to endeavour to answer some of the points in Mr. Cherry's *brochure* on the subject; since argument, from such authority as the Principal Veterinary Surgeon of the Army, is likely to carry weight in the minds of many. I am not, however, afraid of the Legislature ever consenting to the taking away of these Plates, there being too many members of both Houses of Parliament who know that the race is the only criterion of the goodness of the animal, and for that reason would never consent to such a proposition.

The amount expended in the shape of King's Plates is (not £2000 annually—as stated by Mr. Cherry) but 3600 guineas in England and Scotland, and 1600 guineas in Ireland. The distances vary considerably, as well as the weights; but in no

instance is the distance less than two miles, and the race, except in one or two cases, is always heats; nay, the greater part of King's Plates are contended for in a distance of more than three miles, and extending to four miles. I take Goodwood as furnishing about the medium weights, and find that, there, the distance being three miles and five furlongs, the weights are—three-year-old, 7 st. 4 lb.; four-year-old, 9 st. 2 lb.; five-year-old, 9 st. 13 lb.; six, and aged, 10 st. 4 lb. Surely, Mr. Cherry had not taken the trouble to look over the Racing Calendar when he stated that "short distances, and carrying very light weight, has reduced the race-horse to a feeble breed."

If Mr. Cherry, or any other man in the world, could give us an estimate of the character of the horse by looking at him, he might then with some degree of consistency talk of "strength, especially in the limbs, perfect flexion of joints, firmness of step, good temper, and activity, roundness in the region of the heart, &c." as being the points to which we should turn our attention in breeding; but, as we know that, with all the most perfect symmetry imaginable, size, and every other circumstance favourable, as far as appearance goes, the animal may prove a brute of no kind of value, we should, were we to give up the test—the race—soon degenerate to, perhaps a good-looking class of horses, or, rather, such a class as Mr. Cherry might desire, but which would only please the eye to impoverish the pocket; and in this I do not allude to racing only. According to Mr. Cherry's notion, a good judge should be capable of selecting the winner by taking a glance at the animals previous to the race; but I know that he would find it a losing game to back his opinion; for we often see the most unlikely looking animal outstrip a field of good-looking horses. Now, fortunately for our breed of horses, we have preferred the good to the good-looking animal, and hence all our superiority in the breed of horses in this country. I cannot do better than give you an instance out of many that I have seen of the kind:—In the year 1836, at Doncaster, I witnessed the race for the King's Plate, contended by Mundig and Venison: there were others in the race, but the two mentioned were horses of repute, and known to most men. Mundig was a fine large powerful looking horse, 16 hands high, and had been fortunate enough to win the Derby: his shape, strength, breeding, and character, made him a great favorite for the race: he being then four years old. Venison, equally well bred, looked the little, shabby, light weed. He had run many races during the year, and travelled great distances, and not in a van, as they do now. He arrived at Doncaster only the night before the race, from Warwick; and, as far as appearances went, the judge, looking at the two, would have said it was "a horse to a hen;" but the

race proved the qualifications of the weed to be far superior to those of his better-looking competitor, for he nearly distanced him at the finish of it. To trace these animals after their racing career will afford another proof of the race having been the true criterion of the animal. Mundig, from his size and shape, and having won the Derby, began his career as a covering stallion under the most auspicious circumstances; but in a few short years his stock proved valueless, and he was sold to a Prussian for 400 guineas—a very small sum for the winner of a Derby. The other horse, Venison, is now covering at 25 guineas, and is the sire of Alarm, and many celebrated horses, and is deservedly one of the best stallions in the country.

On attentively considering the circumstances just narrated, and which are too well known to admit of their being questioned, I think Mr. Cherry would have been likely to have fallen into the error of selecting Mundig instead of Venison as a stallion: and it was the race that first indicated the error of such a choice; for, had not his qualifications been found good, he might have been sold from his appearance for a small sum as a weed. A few weeks since, I saw an account of a pony, under 13 hands, trotting in harness fifteen miles in an hour. How many good-looking horses are there 15 hands high that have no pretension to do the same thing! Sir Harry Smith, or any other general officer, I take it, would prefer the one that could perform rather than the one that merely looked like performing. Take away the race, and a degeneration would ensue that would certainly endanger a breed of horses acknowledged throughout the world for their superior excellence.

THE CATTLE EPIDEMIC.

By JOHN STORRY, V.S., *Pickering.*

To the Editor of "The Veterinarian."

Sir,—THE epidemic which has prevailed to such an alarming extent among horned cattle in this country for these few years past has likewise been severely felt in these parts. And since I have had to attend great numbers of them in various stages of the disease, and as the subject is now attracting the notice of the Royal Agricultural Society, who have offered a prize of £50 for the best Essay on it, as well as the attention of others who are interested in the preservation and healthy condition of our cattle (in

which, indeed, all classes of the community are deeply interested) you will, perhaps, admit a paper on the subject into your valuable periodical, *THE VETERINARIAN*, from one who has had such ample experience of the disorder for the last two or three years.

THE SYMPTOMS of the epidemic, or, as it is more properly called, *pleuro-pneumonia*, are not always the same, but vary according to the age, constitution, and condition of the animal attacked; and consequently the treatment must be diversified. I have had to attend some cases that have been given up by other practitioners, and have in several such instances been successful in restoring the animal to health and soundness. Indeed, in a very great number of cases to which I have been called on the first appearance of the disease, I have succeeded in saving seven out of nine; and out of the eight last cases I have had to attend, only one has died, the others having perfectly recovered.

In almost every case I find it necessary to bleed and give aperient medicine, with the exception of a few cases wherein the pulse is greatly depressed: it is then necessary to promote circulation by stimulants, &c.

As it would be impossible to give a regular and uniform mode of treatment where the same disorder assumes so many different forms of attack, I propose giving two cases, narrating the symptoms attending each, with the mode of treatment in each adopted.

CASE I.

On the 7th February, 1845, Mr. Thomas Dobson, of Pickering, farmer, had two milch-cows attacked with *pleuro-pneumonia*. He sent for his "farrier," who attended them until one of them died, and the other was given up by him to die. He said, there was no chance of her recovery, as one of her lungs was gone.

Mr. Dobson then sent for me. I attended, and found the cow standing, having her respiration very quick and laborious, and giving a sort of grunt, repeatedly, as she respired. Pulse about 90. I was told, she had not eaten any thing for several days, but had been supported by a little gruel, which had been given her with a horn. After having examined her minutely, I found the symptoms much the same as I had met with in similar cases, which I had treated successfully, and therefore I told Mr. Dobson that I had great hopes of her recovery, through proper treatment. I bled her freely (the blood proving very aqueous), and administered such medicines as I had been in the habit of using in similar cases. Gradually she recovered, and was in a few weeks perfectly cured. Then she was turned out to grass, well fed through the summer, and sold the latter part of the year to a butcher.

CASE II.

On the 29th August, 1847, Mr. John Haxby, of this place, had an Irish cow taken ill, which he had just bought out of a drove of cattle that had been driven several miles. When I was called in to attend her she was evidently labouring under the symptoms of pleuro-pneumonia. She was standing, emitting a continual hoosing and rattling noise in respiration, and looked very ghastly. Pulse sank to 35 or 36. Rumen disordered; hidebound; bowels constipated. After bleeding, the pulse rose to 70. It being indispensable to administer aperients, some time elapsed before I could give sedatives to quiet the system. This being accomplished, the cow evidently felt greatly relieved; she would not, however, either eat or drink. I therefore ordered her to have weak gruel, which was followed by happy effect. Her appetite returned gradually, and in a few days the pulse lowered to 45. She then began to feed a little, rumination became restored, her recovery soon proved complete, and she has done well ever since.

To the above cases I could add numerous others whose cures have astonished their owners, who would be ready (including Mr. Dodson and Mr. Haxby) to satisfy any inquiries that might be made relative to these and other cures of mine of the pleuro-pneumonia.

Believe me, Sir, to remain,
Your's very respectfully.

17th January, 1848.

DEFECTIVE VETERINARY EDUCATION.

By ALEX. HENDERSON, *M.R.C.V.S.*,

Veterinary Surgeon to the Queen Dowager.

Sir,—IN a letter which I addressed to you, and which appeared in your last Number, reflecting on what I considered to be a gross dereliction of duty, in not giving the pupils at the Veterinary College a proper degree of instruction in the practical part of their education, much more might have been adduced; but I trust that sufficient has been said on that particular point to draw the attention of the proper authorities to this important subject. For, not only has there been a want of attention to the proper instruction of the pupils, after they have become such, but every applicant is admitted who presents himself with sufficient fees, without any

attention as to what may have been his previous pursuits; however at variance they may have been with that general knowledge of animals, and their habits, without which the knowledge requisite to their treatment in disease is with difficulty acquired, and the requisite tact, so essential to skilful manipulations, never becomes perfectly attained.

In the original laws of that Institution, it is clearly manifest that particular attention was paid to this subject. It is not requisite to enter into a history of the causes which have led to a neglect of the original laws; but I would draw attention to the fact, that, while all other branches of science, during the last fifty years, have become more and more strict in the requisite qualifications, and have been enlarging their curriculum of study, the veterinary schools have not only ceased to advance, but actually have been retrograding. It is true that recently a slight improvement has taken place; but still our Institution is far behind what it was originally intended to have been by its founders.

If, like the human branch of medicine, we were possessed of the advantages of large hospitals, infirmaries, or dispensaries, in which the ravages of disease might be largely noted, then an apprenticeship might be of little or no value; but with us it is different. We possess nothing of the kind, nor is it probable we ever shall have; hence, what may be valueless to the medical profession becomes to us of paramount importance.

The simple dressing of a foot or a wound, the administering of a dose of medicine, are common-place duties that may be easily acquired; but the patience, the tact, the capability of making available all or every resource that may be within reach in cases of emergency, can alone be acquired by long, careful, and judicious training. Hence, the necessity of an apprenticeship is, with those best acquainted with the subject, looked upon as *imperative*; not because they approve of apprenticeship simply, but from there being no substitute for it.

With these simple facts before us, it cannot but strike every one who may take the trouble to reflect, how strange it is that those who have the management of our only English veterinary school should so long and so virulently oppose its introduction, by throwing every impediment in the way: by admitting, as pupils, those whose pursuits have been at total variance with the knowledge of animals, and classing them with those who have been previously properly trained; requiring no longer attendance from one than from the other, or giving one class more instruction than the other, but submitting them to the same ordeal as those who had devoted years to the acquirement of the principles of their art, and launching the trained and untrained upon the public as equal in capability.

Of this, both parties so situated, as well as the public at large, have equal right to complain;—The uninitiated, that he has been deluded into a belief that he has been instructed in all that is requisite to insure moderate success in the outset of his professional career; while, alas! he has but to discover, that the first requirements for which he has need are all but unknown to him. The previously trained, and therefore better taught, has still stronger reasons to complain; for not only has he been placed below his proper level, but is held in diminished estimation in the eyes of his employers, the public, in consequence of the failure of the unqualified man. Again; the public have to complain that the unqualified should be palmed upon them by high-sounding testimonials, which they soon discover not only to be of little worth, but actually tending to the injury of all parties.

It is in vain to attempt to blink a question of so grave a nature. Such might have been done in days passed by, when Professor Sewell gave me to understand, when I first entered the College as a pupil, many years since, after he had ascertained what had been my previous pursuits.—*the sooner I forgot all that I had learned under my father, the better it would be for me.* Time, the test of all things, has proved the fallacy of such an injunction, and has taught me, after long experience, the absolute necessity of elementary instruction.

I beg particularly to draw the attention of all parties interested to so important a question as the fitting education to be adopted for the proper formation of the future veterinary practitioner, and more particularly do I wish to direct the attention of the managers of our veterinary schools to this important subject.

I remain your very obedient servant.

Cockspur-street, Jan. 21, 1848.

Extracts from Foreign Journals.

The *Clinique Vétérinaire* for March, 1847, contains a Memoir from the pen of M. F. de Nanzio, the Veterinary Professor at Naples, on the Conception and Parturition of a Mule. The common opinion is, that mules, both male and female, are in general incapable of reproduction. The ancient proverb,

Quum mula pepperit,

appears to have gained strength with age. Some persons have attributed this incapacity to a vicious conformation in their genito-urinal apparatus.

In setting out, it may be as well to observe, that we apply the name *mule* to any animal the product of the commerce of two individuals of different species; such, for example, among birds, are the offspring from the canary coupling with the goldfinch; and, among quadrupeds, from the intercourse between the ass and the mare, or between the stallion and female ass. In the latter case, therefore, it appears, two generations have had this name given to them. In English, we remain without any distinctive appellation for these, though among the French the former goes by the name of *mulet*, the latter by that of *bardot*. Such distinctions are requisite, from the circumstance of one species of mule differing from the other. The *mulet*—the offspring of the male horse and female ass—is much larger than the *bardot*; possesses a longer and more developed neck, rounder sides and croup, and elevated haunches; and is a very strong, hardy animal, capable of enduring a great deal of fatigue; contenting himself with ordinary and scanty fare, and being but little obnoxious to disease. On the contrary, the *bardot* is *small* and *low* in stature, with a short thin neck, salient back, pointed croup, and low and drooping haunches; insomuch that, when we come to compare the two, we feel disposed to agree in opinion with Buffon, who affirmed that in the female resided the unity of the species: for certain, in the examples just given, the horse is paramount in one instance, while the ass predominates in the character of the other. Beyond these characteristics, however, are secondary qualities which belong to the sire, as is exemplified in the voice of the *mulet*, in his large ears, the shape of his head, form of his tail, slender sinewy limbs, and long narrow hoofs; while in the *bardot* we have the neighing voice, the small head, the short ears, the tail clothed from above downwards with hair, the large limbs, &c. Thus, Aristotle, describing the mule, has written,—

“Magnitudine corporis et viribus magis fœminæ quam mari simile evadit quod nascitur;” and Columella, on the same subject, has said, “qui ex equâ et asinâ concepti, generantur, quamnis a patre nomen traxerunt, metri per omnia magis similes sunt.”

There are instances on record, both ancient and modern, of mules having generated, but the one given by M. Nanzio is more complete and instructive. In the *Commune d'Auzano*, province of Capi Sanata, a mule, the property of Francis Messrangeli, foaled on the 15th of July, 1844. The novelty of the event astonished the inhabitants of the province, and the prefect sent for the district veterinary surgeon, who, through his report of the circumstance,

authenticated it. And M. de Nanzio himself, anxious for some intelligence on the matter, went to the place towards the end of May 1845, and saw the mule in question together with its little one.

We may safely affirm then, that, as mules have bred once, they may do so again, and that we have no right to regard them as altogether sterile; and that, as a consequence, Pliny was in error when he asserted that animals issuing from two species become a third species, differing from either parent, and incapable of reproduction. And so, as little reliance must be placed in the judgment of others, who, blindly credulous of what has been said by the Roman naturalist, re-echo his words, and say that the mule cannot breed.

Buffon followed Aristotle in the same doctrine, supposing that any commerce between male *mulet* and female *bardot*, or even between male and female of the same cross, would prove unproductive; and for the reason, that two natures came together already altered by generation.

This assigned sterility in the mule species has led to an examination into the causes of their barrenness. And M. Hebenstrach, a believer in their absolute sterile nature, pretends to have discovered the causes of it, alleging that it proceeds from the semen of the mule wanting the spermatic animalcules;—from the circumstance of the ureter opening into the vagina, whereby, whenever the animal urinates, the sperm is washed away;—from the uterus being slender and pellucid, compared with those of other animals, and consequently incapable of supporting the weight of the embryo;—from the ovaries not containing any transparent vesicles commonly called *ova*;—lastly, from the Fallopian tubes being too narrow.

These reasons, says M. de Nanzio, have been refuted by M. Brugnone, who maintains that the external genital organs of the mule present no imperfection, that the spermatic vesicles contain sperm in abundance, and that the ureters open no way differently from those of other solipedes, &c. Notwithstanding this, however, we have regarded it as our duty to institute fresh inquiries into these matters, and principally as regards the mule; we taking another view of the question, and thinking that the mule could hardly be sterile without some important defects—either, first, in the organs producing the ova; or, secondly, in the tubes destined to conduct the ova into the organs of gestation; or, thirdly, in the conformation of the womb.

In comparing the ovaries of the mule with those of the mare, we cannot say we have discovered any especial difference. The vesicles of Graaf are equally visible in one and in the other. But the

most important inquiry, without doubt, is that which concerns the proper structure of the vesicle, as well as the existence and structure of the ovum contained within it; since it might happen that the ovary might contain a vesicle, but that be without ovum; or else, that the ovum might never depart from the ovary, or be duly received by the duct; and, lastly, that the ovum might not have that composition and structure fitted for fecundation by the semen of the male.

It is true our examinations, being hitherto confined to aged mules, are not such as to warrant us in answering such questions as these; at the same time, taking the case of the actual procreation of the mule, these questions are in truth resolved, since, had not matters being fitting and proper, the mule would never have conceived.

The subject is both curious and interesting, and, being as yet but unsatisfactorily investigated, both needs and deserves further examination.

LECTURE ON THE INFLUENCE OF EXERCISE ON MAN AND ANIMALS.

[Continued from "La Clinique Vétérinaire" for March 1847.]

Temperature.

THE wind is one of the greatest obstacles to freedom of movement; it tends to fatigue a horse much in his course. It has been calculated that the wind opposing a horse in a gentle trot calls for four times the amount of force; in a full trot for nine times; in a gallop for sixteen times; and in the race it is by no means a rare thing to see a horse fall in a state of suffocation after having run any great length of distance in the face of the wind.

Soil.

The influence of soil is shewn more on horses in draft. The weight and construction of the vehicle a horse has to draw will tell in deep and rough ground; in the former in proportion to the impression made in it by the wheels, large wheels, from the less impression they make, being the best to run; though on hard and uneven ground they become an obstacle to draft, from their greater weight.

Carriages and Draft.

Our engineers of bridges and causeways—whom in a parenthesis we may accuse of having thrown the greatest impediments in the way of improvement of horse draft, by extravagantly lauding

the invariable employment of large wheels, on account of their doing less injury to the roads—these engineers pretend to determine the weight and draft of a vehicle.

The draft of a carriage depends entirely on the construction of its wheels. We are now speaking of a carriage without springs; for when springs are added—an addition so desirable, both on account of the preservation of horses as well as roads—the traction is diminished by one-fifth. In the construction of wheels, barring their diameter, the axle-tree, and the friction between it and them, are the points to be looked to.

GENERAL IDIOPATHIC TETANUS CURED BY ETHER, ADMINISTERED IN THE FORM OF FUMIGATION AND CLYSTER.

[Clinique of the Alfort School, "Recueil de Méd. Vét." for Oct. 1847.]

A RIDING mare, nine years old, the property of M. Harvé, at Charenton, had for three days been failing in her appetite, listless, and lazy at work, for which she was bled by a veterinarian, but without benefit, and therefore he brought her to the College to have her submitted to proper treatment.

HER SYMPTOMS at present are—lofty carriage of the head; ears erected and fixed; nostrils rigid and dilated; eyes fixed, prominent, and brilliant; pupils contracted; nictitating cartilage thrown over the cornea on excitation; motor muscles of the jaws firmly contracted, occasioning insurmountable resistance to the separation of the jaws; muscles of the neck, back, and loins, in the same state of tension; tail slightly erected; limbs stretched out, giving to the trunk the appearance of being supported by four pillars, and making progression to resemble that of an automatic machine, moving all of a piece; the vertebral column appearing as inflexible as a metallic rod; under the excitement of motion the ears and tail growing more rigidly erect; the muscles, in particular the extensors of the limbs, contracting and elongating in a strange remarkable manner, the same phenomenon being apparent in the muscles of the thorax and abdomen. In the stable, the prehension, mastication, and deglutition of food, solid and liquid, are attended with so much impediment, that these functions, after all, are but imperfectly performed. The respiration is short, catching, and accelerated; the pulse slow and wiry.

THE DIAGNOSTIC, by symptoms so pathognomonic, was rendered unequivocal.

PROGNOSTIC, grave. Tetanus being a disease in horses commonly fatal; recovery being the exception.

TREATMENT.—Almost every means furnished by the thera-

peutic catalogue have been used in tetanus. Antiphlogistics, sudorifics, diaphoretics, revulsives, purgatives, antispasmodics, special excitants of the nervous system, all by turns have been put in practice, either separately or in combination, and all with occasional though rare success.

It was thought a favourable opportunity to have recourse to ether, whose action on the nervous system is so diametrically opposed to those by which tetanus itself is produced. Moreover, the success already obtained in the treatment of tetanus in man by the same remedy proved an encouragement to make such an experiment.

ON THE 8th JUNE, the day of her admission, she was clothed and kept hot with sheep skins; and besides, had prescribed for her vapour baths, laxative drinks, and clysters. Considerable difficulty was experienced in getting her to swallow liquids, the contractions of the muscles of the jaws offering all but insurmountable obstacles.

JUNE 9.—The trismus is a little augmented, as well as the tension of the muscles in general. At the slightest outward excitement the face becomes contorted, the ears erect, the nostrils dilated, and the jaws make a grating noise; the general spasms become more intense; the nictitating cartilage is thrown over the cornea; and the region of the neck, croup and thighs, acquire the hardness of marble. In spite, however, of her trismus and difficulty of deglutition, the mare is eager for solid food; she seizes a little hay between her lips, which from their tense and rigid condition are without the power of transferring it to the mouth. During the day may be observed, profuse sweats about the ears, and sides of the neck, in the flanks and insides of the thighs. The pulse is small and wiry; the pulsations of the heart strong and hurried. Respiration slow and deep. The limbs still remaining as stiff and immoveable as four posts.

The laxative drinks are continued; and, at twice, is administered to her twenty grammes (nearly 3vj) of the aqueous extract of opium. Such, however, is the difficulty of moving the jaws that it is impossible to force her to swallow the medicine: hardly is it introduced into the mouth before it is all rejected.

JUNE 10 & 11.—The disease has advanced; every symptom is aggravated. The trismus, the tension of the muscles, especially the extensors, is at its height. Respiration is *short* and *deep*; the flanks are drawn up to their utmost; they are, indeed, almost motionless; and the pectoral muscles are so rigidly contracted that the ribs are rendered immoveable. The animal is ever on the verge of asphyxia. Those members the more distant from the centre of gravity are constantly in a complete state of inflexibility,

so that it is with extreme pain motion is excited in them; and then even, rather a tetanic convulsion is excited than a change of place. In spite of the severity of the disease, and the difficulty, not to say impossibility, of prehension (with the lips) and of deglutition, still does the animal seek after hay and corn.

Such was the condition of our patient when we came to the resolution to subject him to the action of the vapour of ether.

JUNE 12:—*First etherization.*—In the absence of a suitable apparatus for the administration of ether to an animal so large as a horse, we had to adopt means which, though acknowledged to be very imperfect in many respects, still answered the end in view.

We fixed, or rather adjusted, a fumigatory head-collar around the head, above the nostrils and commissures of the lips, and by two ropes tied the animal fast to the rack: fitting the inferior part of the halter most exactly to the circumference of an ordinary pail, at the bottom of which was placed a wooden bowl, previously furnished with a large sponge impregnated with nearly half a pint of ether.

The inhalation was not tardy in manifesting its effects. During the first inspirations the horse resisted violently, under the influence of a veritable attack of spasm. In spite of the energetic muscular tension, the limbs, and the head and neck, became convulsed; the respiration growing very quick, and the movements of the flanks tumultuous.

This course of symptoms insensibly subsided; the commotion changed into a perfect calm; the respiration became slow and deep; no more than two inspirations could be counted per minute, instead of thirty-eight, as before; the pulse was small and quick. At the end of an hour a state of profound drowsiness came on; the muscular spasm and rigidity was less conspicuous; it was possible to produce some slight motions in the limbs and jaws; the eye had lost its unnatural brilliancy, and the countenance that expression of anguish so marked in the tetanic subject. This state lasted a quarter of an hour; at the end of which time, sleep began once more to forsake the patient, and with his awakening returned rigidity, spasm, grinding of the teeth, brilliancy of the eye, immobility of limb, and acceleration of respiration. Desirous of renewing the influence of the ether, we attached afresh the fumigating apparatus. It was with great difficulty we arranged the apparatus again. From the very first inspiration the animal was seized with an attack of furor. He struggled violently, fought with his fore legs, and vehemently shook his head. He broke away his cavesson and fell down upon his left side, and, immediately afterwards rising with energy, he experienced a violent exacerbation it would be difficult to describe. The respiration grew quick

and panting. For a moment he was drawn up in every part; his neck was ewed, his head perpendicular; the limbs, the fore especially, stretched out to the utmost, were collected under the centre of gravity as though the animal were going to make a spring; the countenance was drawn up, the nostrils dilated; and the lips and mouth beslabbered with saliva.

This tetanic spasm lasted ten minutes. Gradually, calm returned; and soon afterwards the animal relapsed into a sound sleep: without being wholly under the influence of sleep from etherization, he remained listless to every thing around him; often, indeed, not feeling the puncture of any sharp body.

The phenomena just described commenced at half past 10 o'clock A.M., and terminated at mid-day.

In the afternoon, the horse experienced sensible relief. To the muscular spasm succeeded remarkable flaccidity. Perspiration, circulation, exterior plight, all contrasted strangely with their state in the morning. He now masticates hay held out to him, and contrives to dilate the pharynx for the alimentary bolus.

About three o'clock the patient again declined. Spasm once more seized his muscular system, commencing by constriction of the jaws, as evinced by the grinding of his teeth, again to be heard; profuse sweats bedew the flanks, neck, sides, and interval between the anterior and posterior limbs. In a word, the disease has returned in the same character it presented before the etherization.

JUNE 13.—The animal's condition is not changed. Etherization is applied the same as before, only more ether is used. The operation commenced at half past eight and terminated at three-quarters past ten o'clock. The animal displays the same symptoms nearly as before. He plunges violently, throws himself backwards, struggles, trembles all over, standing with the fore limbs bent; the skin is covered with perspiration; the pupil is quite dilated; at last, he fell down in his stall like a lifeless mass. In the course of his agitation he had disencumbered himself of his inhaling apparatus; and the sleep now produced by the etherization was less profound and enduring than the former one. At the expiration of twenty minutes he was roused up again, and there was evident already a diminution of the spasm. The weather being very fine, he was walked out for a little while in the hospital yard: breathing the external air seemed of service to him, indeed, in the course of his walk he commenced neighing and changing his legs. In returning to his stable there was manifestly commencing a general flaccidity; the appetite admitted of gratification; he seized the hay, and swallowed about five pounds. Up to about four o'clock in the afternoon, the essential characters of tetanus, the muscular ten-

sion and rigidity, remained but in a feeble degree. The muscles of the neck have all along maintained greater firmness than those of other parts of the body.

Apprehending, as was remarked last evening, lest, when the effects of the ether should have passed away, the animal should relapse into his tetanic state, we decided on continuing the ether under the form of clyster. By so doing, we escaped the fears we had reason to entertain of asphyxia, from the imperfection of the ether apparatus we had used.

JUNE 18.—At four o'clock was given him six ounces of ether in a clyster. At the expiration of half an hour there came on a well-marked state of somnolency. The amelioration lasted all the evening. The motion of the jaws is grown quite free. The muscular system is in a moderate state of tension. The animal again ate about five pounds of hay with fair appetite. In the evening there came on a fœtid diarrhœa.

JUNE 14.—Still better. The diarrhœa is increased since last evening. The trismus is a little less. The patient eats from time to time the parcels of hay set before him. Fresh etherization is tried with the apparatus used before. In an hour and a half the somnolence returned, accompanied by considerable retardation of respiration, but no falling down. To the drowsiness succeeded a brisk exacerbation; a veritable tetanic paroxysm breaks out; the animal once more becomes unmanageable; it is with great trouble he is kept in his stall. Attributing part of these phenomena to the commencement of asphyxia, from the prolonged contact of the ethereal gas with the pulmonary surface, we discontinued the inhalations, and in their place substituted ethereal clysters. Nine ounces of ether were immediately thrown into the rectum. In the evening the patient was sensibly better.

JUNE 15.—Continues better. There is less tension in the masseter as well as in all the other muscles. What, however, is the most remarkable, is the pliability of the *alæ nasi*. The countenance, also, is less contracted; the eyes less glassy; the breathing calmer; the appetite improved, he having, in the course of the day, eaten half a ration of hay and corn.

Renewed inhalations of ether for an hour and a half: the clysters having been suspended on account of diarrhœa, which is now more violent than it was last evening, and more offensive. A violent inflammation has set up around the margin of the anus and the lips of the vulva; and the rectal mucous membrane likewise is intensely inflamed, the tegument of the perineum being in part infiltrated. This inflammation, caused by the ethereal clysters, has been relieved by antiphlogistics and anodynes, the excoriations exteriorly being kept sprinkled with absorbent powder.

To-day was visible considerable amelioration in our patient day by day the disease is wearing itself out; the patient eats slowly, and with little difficulty consumes his full ration, being ten pounds of hay, the same quantity of straw, six pounds of oats, and four bunches of carrots.

JUNE 16, 17, and 18.—Our attention was directed to the rectal excoriations. The passage of the excrementitious matters and the frictions of the tail have produced a vast denuded surface, with a disposition in certain places to gangrene. Irritative fever is the consequence. Measures are taken accordingly.

JUNE 21.—The wounds have assumed a healthy aspect; they are in progress towards cicatrization. Inflammation is passing away, and the constitutional fever along with it. Respiration and circulation have almost returned to their natural rhythm. The appetite is good again. The movements comparatively free. In the course of his walks he neighs, and dances, and seems tired of his repose.

From the 22d June to the 12th July, the date on which he left the hospital, all the tetanic symptoms underwent sensible diminution: every day amendment was visible. By degrees nearly the whole of the muscular system recovered its normal properties. Tension and stiffness continued up to the 5th July in the extensor muscles of the limbs, and principally in the constrictor muscles of the jaws, which re-acted but very imperfectly on the alimentary cud. And this caused a necessity, from time to time, up to the day of his departure, to remove the cuds lodged within the pouches of his cheeks, in order to restore the free exercise of manducation.

* * * Will not this case incline some veterinarian, the first opportunity he may have, to test chloroform in tetanus?—ED. VET.

Extracts from Domestic Journals.

MR. BRANSBY COOPER.

[From "The London Mercury."]

No one is more opposed to the hospital exclusive system than we; but as in the days of the old borough-mongering parliament a man of genius occasionally appeared, so in those of existing medical monopoly one of ability at rare intervals is found. The gentleman whose name stands at the head of this article may be adduced as an instance of the remark. He is one of the

"Rari nantes in gurgite vasto"—

one of the few talented men belonging to the clique—one, in short, though by no means of the highest order of ability, of the trump cards of the pack.

Farther than that he was the nephew of the late Sir Astley, we are not acquainted with any of the details of Bransby Cooper's early life; but we believe that, in his sphere, it was a stirring one; and several passages in his "Life" of his uncle would lead to the inference that he had been concerned in many churchyard scenes, as well as *grave* recollections. As these, however, are of by-gone date at the present time, and of questionable taste at all times, we shall not refer to them now. It was one of them, we believe, which first attracted Sir Astley's attention, and induced the recommendation that his nephew should be devoted to the interests of the church beyond the walls, instead of those within. The young gentleman was accordingly despatched to London instead of being confined to the provinces; he was furnished with a scalpel instead of a breviary; and he is consequently now elevating his finger before the students of a London lecture-room, instead of shaking his head in the pulpit of some Norfolk parish.

Having duly completed his noviciate at Guy's and St. Thomas's, where his uncle then reigned in undisputed supremacy, Mr. Cooper's frolicsome and adventurous disposition led him to seek service abroad in the medical department of the army; and we believe that so little did he confine himself to the mere routine of his profession, or to the rear, which is commonly considered its department, that he quickly became a subject for treatment himself, instead of attending in this capacity upon others. Going out with the design of superintending the limbs of the troops, he with difficulty escaped with the loss of his own. In looking after their organs, he lost his eye; for which he is indebted to a pension, and a peculiarity in his appearance which renders him, for his similitude to England's greatest naval hero, strikingly remarkable.

At the end of his period of service, or when thus disabled, Mr. Cooper returned home; and it is now that the first, and still the most important, incident in his life occurred. He was, of course, quickly inducted into a hospital. His uncle's influence at once secured him a leading-place, as surgeon to Guy's; and it was shortly after he entered upon this career that the memorable trial with Mr. Wakley took place.

*

*

*

*

*

We make these remarks with no reference whatever to Mr. Cooper: on the contrary, we believe that he wanted no such advertisement, and assuredly we feel confident that on his part there was not the slightest shadow of moral obliquity. We give him full credit for being an able and honest surgeon, as well as a

bold, and upright, and fearless man; incapable of committing any act inconsistent with the character of a gentleman, of having recourse to any hole-and-corner practices, or in any degree lacerating the feelings and increasing the sufferings of either man or woman. Nor is he one likely to resort to law where a question concerning his honour is involved. There is no member of the faculty, we believe, who would more readily adopt the customary means of resenting such an imputation; and this is paying him no slight compliment, as the faculty, whatever be their failings, are not, with one or two noted exceptions, destitute of courage. They, on the contrary, daily risk their lives for others; and there is, perhaps, not above one man in the profession who would consent to retain life at the cost of another's honour and his own.

This trial, as already mentioned, forms the principal public event in Mr. Cooper's life, and no incident has since occurred to bring him conspicuously before the eyes of the community. When it took place, he was almost the junior assistant of the hospital in which he is now amongst the senior surgeons. He has subsequently become known as a lecturer and an author, but in neither capacity calls especially for notice. His lectures are sound without being brilliant, and, if not so off-hand as those of his late uncle, are more correct in taste and structure. His *Life of Sir Astley*, already alluded to, is his sole extra-professional work; and though by no means perfect as a piece of biography, it is, perhaps, as impartial as could be expected from such a source. It abounds with adventures and incidents which might well have been omitted; but this possibly is to be attributed more to the subject than to the writer of the memoir.

In his younger days, Mr. Cooper was described as a fierce-looking Gorgon; but he never could have presented the bold, devil-may-care, burly appearance of his uncle. At present, now that nearly sixty summers have passed across his forehead, he is an exceedingly sedate, self-possessed, compact, and unassuming looking man. When uncovered, his resemblance to Lord Nelson is remarkable; and if asked to sit for the portrait of that hero, he would undoubtedly have formed a much better picture than the one-armed image which figures in Trafalgar-square, and only requires the addition of a cork-leg to render it supremely ridiculous. This peculiarity of his physiognomy has frequently been remarked, especially in courts of justice, where, somehow or other—possibly from the central position of his residence at Charing-cross—Mr. Cooper chances to find himself more frequently than any other member of the profession, with the exception of one brother chip, who has fixed his domicile still nearer to St. Stephens's, for the purpose of meeting with parliamentary accidents. Mr. Cooper

was the gentleman called in on the memorable occasion when Mr. Drummond was shot for Sir Robert Peel, and we remember he especially distinguished himself by the clearness with which he gave his evidence—a characteristic very rare with medical men. For their benefit, we may add, that the secret was short. He as far as possible avoided digression and explanation, and confined himself as closely as he could to monosyllabic answers.

EVIDENCE TAKEN BEFORE THE SELECT COMMITTEE ON MEDICAL LEGISLATION.

[From the Medical Times.]

(Joseph Henry Green, Esq., F.R.S., called in and examined.)

Professional Titles.—I AM a member of the College of Surgeons and one of the council; I have been one of the council for ten years, and a member of the college about thirty years. I have ceased to practise generally, but I still continue to be surgeon of St. Thomas's Hospital. I have been one of the surgeons of St. Thomas's Hospital about twenty-five years. My connection with St. Thomas's Hospital has enabled me to watch the progress of the students in general in the acquirement of the knowledge of their profession, for I have been occupied in teaching during the whole of that time, and indeed longer—for upwards of thirty years; I began to be a teacher before I was a member of the college: I have been engaged, therefore, instructing the surgical youth upwards of thirty years. I am now one of the council of King's College; I was professor of surgery there.

Opportunities for observing the Progress of Students.—My connection with those two institutions has given me opportunities of observing the progress, or otherwise, generally made by youths studying surgery within the last thirty years. I should fear that their proficiency as a body has been rather retrograde in respect of those particular branches which I have taught, anatomy and surgery. Those two branches are the cardinal points in the science of medicine, certainly. I ascribe this retrograde movement to a greater demand being made upon the time of the young men by the system of instruction, which requires attendance upon a greater number of lectures, and attention to be given to a greater number of subjects, than formerly. * * * *

Grinding.—* * * * I have mentioned grinding as preparatory to the examination before the College of Surgeons; I am now an examiner of the College of Surgeons, and by examination we can detect grinding, and imperfect knowledge based upon grind-

ing, to a very considerable extent. We consider it our duty to check that system by the course of examination in the College of Surgeons. I do not know whether the examiners on the part of the Society of Apothecaries are public teachers, but I believe that they are limited in their selection of examiners, and that, therefore, they are not capable of choosing those who may be best fitted for the office.

Unsound Knowledge, by whom detected.—I apprehend that no other persons than those accustomed to teach have the power of detecting unsound knowledge from grinding. It is part of the business of a teacher to be constantly examining, with the cases of disease, the dead body, or whatever the subject may be, before him. We do not, in examining for admission to membership of the College of Surgeons, test surgical skill by actual dissection; the only practical part of the examination is that of having the bones before us, but which assist very much in examining as to the knowledge of anatomy.

Examination of Members.—I have been examiner only about twelve months. The examination as now conducted by myself and colleagues is stricter than it was when I was admitted a member, and underwent examination—considerably so. Therefore, unless it were for this interruption of the study of surgery and anatomy which I have described, from the interference with it by the preparation necessary for the examination before the Society of Apothecaries, so far as it depends upon the College of Surgeons, the standard has been rather raised than lowered; the students too are impressed with that opinion, that the examinations for membership are much stricter than they were formerly. I cannot speak from my own experience, but only from the information I have obtained among the students; but I believe the examinations are now more strict and searching than they have ever been.

Examination of Fellows.—Passing from the examination for membership to the examination for fellowship, that examination is a stringent and efficient one: there, dissection is introduced into the examination and operations. Grinding cannot prepare for that examination, as regards the practical part of it. I think one must concede to physiology the rank of being the highest, but anatomy is the foundation of medical science. The examination does not extend now beyond physiology, nor does it branch into general literature and general acquirements: it will do so in the year 1850. Notice has been given that, after that year, mathematics, the demonstrative sciences, and general literature, and those acquirements which are necessary for the bachelor's degree at the universities, will form part of the examination for the fellowship. I examine for fellowship as well as for membership. The institution has been

somewhat recent, but I think, taking it on the whole, that as many have come up already as might have been expected; and it has not only excited emulation amongst the young, but likewise among the older men: we have had many members of long standing who have come up for examination for the fellowship. From what passes under my own eye among the young men at St. Thomas's, I think I can hardly say generally that they look forward to standing out, when they attain the age of twenty-five, for the fellowship, and that at an early period of study they look forward to preparing themselves for that honour; but I have met with many instances of men who have so determined. I can venture to say quite affirmatively, on the whole, that the institution of the fellowship has acted, and will act, as a stimulus to the acquirement of greater surgical skill. * * * *

A Single Faculty.—* * * * I am not favourable to a single faculty in the whole profession—certainly not.

The Registration Bill.—And I would not approve of any system of registration which had a tendency to favour or produce a single faculty. I should think it would be a great misfortune to the profession and the public. * * * *

* * * * *

Opinion on Registration.—I myself approve of registration, properly framed and under competent authority. I do not think that the registration under this bill is a registration such as ought to be the standard registration for England, because it does not sufficiently inform the public what the qualifications of the persons registered are. I have seen the register. My opinion is, that there should be a register setting forth in classes the qualifications of the persons registered. * * * *

Tendency of the Registration Bill.—I think that the bill which is now before us has a tendency to the introduction of a single faculty, so it appears to me; but, more than that, it appears to me very likely to diminish very seriously, and very dangerously to the public, the education of medical men. As no benefit would be derived from a higher qualification on the register, they would naturally seek the cheapest schools, and it is very likely to produce a rivalry among the schools, for affording medical education at the cheapest rate, and in the shortest time, and that must necessarily induce a lower professional standard of education.

Penalties.—* * * * That it would be desirable, by penalty, to check practice without qualification, or that it would be more expedient to induce, by encouragement, the possession of qualification, is a very difficult question to decide; but I am disposed very much, if it be possible, to make some legal penalty against unqualified persons practising. * * * * It is one thing to

act in violation of the law, and another to pass a law which shall legalize practice without such qualification. They are two very different things. It is my opinion of this bill which we are now considering, that it would legalize general practice without any adequate qualification.

* * * * *

Apprenticeship.—Apprenticeship I do not see the advantage of; on the contrary, I see many disadvantages as regards the education of professional men. If you could always secure a master who could teach, and who would teach, it might have its advantages; but the facts are so notoriously opposed to that, that one cannot but wish to see the apprenticeship clause done away with. The dedication of five precious years, taken from the time of study, to the compounding of drugs, is an unreasonable period; but even then they do not seem to learn pharmacy, at least they do not acquire an adequate knowledge of the *materia medica*: they may know how to make up a draught, but they do not obtain a scientific knowledge of pharmacy. As regards learning pharmacy, the five years are thrown away. * * * *

The Examiners.— * * * * The examination on medicine would best devolve on those who have made its science their especial object, and the examinations in chemistry and pharmacy should be conducted by those persons who have made the science of chemistry and pharmacy their study. Now, a general practitioner, merely as such, cannot be supposed to have made chemistry and pharmacy the objects of special and scientific study: he, for the most part, and especially a member of the Apothecaries' Company, buys his compounds already prepared. There is not, that I am aware of, any penalty for assuming the designation of a member of the College of Surgeons. I propose that the College of Physicians should examine the general practitioners in medicine. The examination of the Society of Apothecaries should not be confined to pharmacy and chemistry. I do not think that they are persons fitted to examine in pharmacy and chemistry. I would propose another body. They are not by profession what the French call *pharmaciens*, or pharmaceutical chemists. It must be a board composed of persons who have especially made those subjects their study. We have no such body in the profession that I know of; but I did not wish at all to convey the idea that the Society of Apothecaries had not been of very considerable benefit to the profession. Care must be taken not to render the education of general practitioners too expensive. I propose that the College of Physicians should examine them in medicine, some other body in pharmacy and chemistry, and the College of Surgeons in surgery; and it would be very essential, likewise, that another body should

examine them in midwifery, that body being composed of professed accoucheurs. That branch could not be brought within the province of the College of Surgeons; it does not belong properly or entirely to surgery: but you have here in London a much better opportunity of forming such a body, by taking physicians and surgeons who practise in midwifery. That would make four examinations.

* * * * *

Education of Surgeons.—I think it desirable that surgeons, or a certain number of the most eminent surgeons, should receive their education, together with the more eminent members of the law and the church and the gentry of the country, at the universities. I do not think that there is any thing in the nature of the occupations of a surgeon which would make a university education a bad preparation for his professional avocations. On the contrary, I should think it would be of great service to him, in disciplining his mind even for his professional studies, without any ulterior views—without considering the man, only considering the surgeon. I cannot point out any distinction between the mode in which a man who is aiming at the higher and more scientific position in his profession pursues his studies, and that in which a man who is only seeking for general practice pursues them. I should think the principle to which they must both advert would be the same; but it is the misfortune of a person who cannot aim at the higher rank in his profession, that he cannot have his mind so opened, invigorated, and disciplined by preliminary education as to obtain the advantages which the other obtains; but still the profession, I take it, must be studied upon the same principle and with the same views. For example, if you take, as it has been frequently my lot to see, a young man who has come from an apprenticeship of five years, and compare him with one who has been at the university, who has merely taken his first degree in medicine, both of them young men, and nearly of the same age, you will find that it is with the greatest difficulty that the one who has been apprenticed in the ordinary way to a country practitioner acquires information: he has no power of observing and generalizing; in many instances he cannot spell, and cannot put down his thoughts in writing; in short, he evidences in every way great imperfection of mental development, whilst the young man who has come from the university gains more, perhaps, in a couple of years than the other would if he were at the hospital for ten years. The students for general practice are obliged to study too many subjects at once under the present system of examination. They come unprepared in point of mind, and the whole of the information has to be poured in at once. They are over-lectured. * * * *

Professional Trading.—I have expressed in print a very strong

opinion that the medical profession should be as far as possible removed from any thing that should give it the character of a trade. I doubt whether it would be possible to carry it so far as to make it a regulation that general practitioners should not sell drugs; it may be left to their good feeling, and to the improvement which may be hoped for by raising the standard of education: but in the country it would be quite impossible for them not to keep their own drugs; and I take it that their patients derive advantage from it, by getting better drugs than they would get from the small chemists and druggists' shops. I am apprehensive that the tendency of elevating the education of general practitioners may be to introduce a lower class of practitioners in the chemists and druggists. It does not occur to me to make any suggestion to remedy that: I think that the Legislature must always require a certain amount of information, such an amount as will qualify persons to practise with safety to the public; and if you find that chemists and druggists are rising into practitioners, you must require of them the same: therefore it is, though I cannot very well say how it is to be done, that I stated to Sir James Graham it was desirable that there should be something like illegality or penalty affixed to unqualified practice. I trust a good deal to the high standard of professional and gentlemanly feeling for correcting some of the evils which the law cannot prevent. I would endeavour by a system, whatever it was, to produce the highest qualification that you could produce; and to give hope to all, even in the lowest grade, that they might rise to the highest if they would give the time and study requisite for its attainment. I attach the greatest importance to keeping up a high tone of gentlemanly feeling in our profession. On that ground I think it important to encourage the high grades in our profession going to the universities, as tending to connect the heads of our profession with the highest persons in the land; but I would add to that, that I think it essential to the interests of even the lower ranks of professional men; for I think that the one-faculty plan would soon be found to have a very serious effect upon the pocket of the general practitioner. It is the fact that that gentlemanlike feeling is now to a great extent spreading through the profession, and tending to elevate persons who before were in the lower scale of society.

Fees for Education.—The serious effect upon the pocket of the general practitioner to which I referred is, if the standard of payment were not regulated by high fees, you would have a reduction of fees: you would have a run for cheap practice, as you have in other trades. I would not, then, regulate the fees of the medical practitioner by law; the fees of the physician are not regulated by law, and I am very sorry that the fees of surgeons are regulated by

law: it ought to be an honorarium. The way I consider the adoption of a single faculty in medicine would have a serious effect on the pocket of the general practitioner would be this:—if you have one faculty, that faculty must all be brought to the level of the lowest; there would be no grades, no distinctions, nothing elevated in it; and if you brought all to the level of the lowest, it would be a run for cheapness: you would have it degraded into a trade; they would be cheaply educated, and they would compete with regard to the cheapness with which they could attend patients.

CHLOROFORM, THE NEW AGENT FOR PRODUCING INSENSIBILITY TO PAIN BY INHALATION.

Read by Mr. D. Waldie at the Meeting of the Liverpool Literary and Philosophical Society, held at the Royal Institution, on the evening of Monday, Nov. 29, 1847.

[From "The Pharmaceutical Times."]

THE property of various substances existing in the state of gas or vapour to affect the animal constitution has been long known, more particularly with respect to the production of deleterious or poisonous effects; and the same fact has been observed in the case of substances found in ordinary circumstances in the solid or liquid form, when brought by artificial means into the state of vapour, and conveyed into the lungs. And this has been observed more generally in the class of substances called narcotics than probably in any other; in the smoking of opium or tobacco for instance, or in the intoxicating effect of the atmosphere in apartments containing large quantities of wine or spirits.

The discovery, in the latter part of last century, of the constitution of the atmosphere, and the elimination of various substances in the gaseous or aëriform state, possessing very distinct and different properties, opened up a field of investigation on this subject previously unknown. The remarkable and highly-interesting difference in the relations of oxygen and carbonic acid to combustion and life led to the knowledge of these properties in other gases and vapours.

Great expectations, based on theoretical considerations, were entertained at that time by many of the probable utility of gaseous bodies as remedial agents. Dr. Beddoes, one of the most enthusiastic of these theorists, thought that all diseases might be cured by breathing a medicated atmosphere, and in 1798 opened a pneumatic institution at Bristol for that purpose. It is well known that his expectations were disappointed, as the scheme was unsuccessful; but it was the means of introducing to him Davy, then a

youth, who was recommended to him to conduct his chemical processes, and who with great boldness investigated the physiological properties of various gases by trying experiments on himself. From these experiments resulted the discovery of the curious properties of nitrous oxide gas. These were giddiness, a delightful sense of thrilling in the chest and limbs, acuteness of hearing, brilliancy of all surrounding objects, and an unconquerable propensity to muscular exertion or laughter; these were of short duration, and were not followed by the depression and nausea consequent on the use of spirits or opium. The effects, however, were not uniform, some persons having been affected with weakness, tendency to faint, loss of voice, and insensibility. In fact, its effects vary, not only from differences of constitution in various individuals, but also according to the quantity inspired; and, as in the case of the substances immediately to be noticed, insensibility and unconsciousness always result if it be taken in sufficient quantity.

It has been long known, though perhaps not very generally, that the vapour of ether possesses similar properties to nitrous oxide. At what time this was first observed I am not aware; but the earliest notice I have found of it is in "The Quarterly Journal of Science" for 1818:—

"When the vapour of ether mixed with common air is inhaled, it produces effects very similar to those occasioned by nitrous oxide. A convenient mode of ascertaining the effect is obtained by introducing a tube into the upper part of a bottle containing ether and breathing through it: a stimulating effect is at first perceived at the epiglottis, but soon becomes very much diminished; a sensation of fulness is then generally felt in the head, and a succession of effects similar to those produced by nitrous oxide. By lowering the tube into the bottle, more of the ether is inhaled at each inspiration, the effect takes place more rapidly, and the sensations are more perfect in their resemblance to those of the gas.

"In trying the effects of the ethereal vapour on persons who are peculiarly affected by nitrous oxide, the similarity of sensation produced was very unexpectedly found to have taken place. One person, who always feels a depression of spirits on inhaling the gas, had sensations of a similar kind produced by inhaling the vapour.

"It is necessary to use caution in making experiments of this kind. By the imprudent inspiration of ether, a gentleman was thrown into a very lethargic state, which continued, with occasional periods of intermission, for more than thirty hours, and a great depression of spirits. For many days the pulse was so much lowered that considerable fears were entertained for his life."

These facts may be noticed as a remarkable instance of how

long men may stand on the brink of a discovery without reaching it, to which subsequent reflection may shew them that many circumstances have pointed. The discovery now to be treated of we owe to the United States of America. According to his own statement, Mr. Horace Wells, a dentist, of Hartford, Connecticut, in reflecting on the fact that individuals, either in a state of high excitement from ordinary causes, or when intoxicated with spirituous liquors, may receive severe wounds without manifesting the least suffering, was led to inquire whether the same result would not follow from the inhalation of some exhilarating gas, the effects of which would pass off immediately, leaving the system none the worse for its use. Accordingly, in the fall of 1844, he had himself a tooth extracted, and performed the same operation on others, under the influence of nitrous oxide gas, without pain. He states further, that he communicated the result of these experiments to Dr. Morton, Dr. Jackson, and others in Boston. Whether as the result of such communication, or from his own reflection on the effects of nitrous oxide and the vapour of ether, Dr. Morton, of Boston, in September 1846, extracted a tooth from a stout, healthy man, whom he had caused to inhale the vapour of ether, and who avowed a total unconsciousness of its removal. From that time the discovery was made known in America, and speedily found its way to this country, where it has met with the advocacy, scepticism, and opposition, which are the usual fate of such novelties.

Dr. J. Y. Simpson, professor of midwifery in the University of Edinburgh, who has, since the introduction of ether inhalation into this country, carried on the investigation of the merits of the practice with the greatest ardour and assiduity, had been for some time on the search for other vapours possessing the properties of ether without certain disadvantages connected with its use, the result of which has been the discovery of such properties in chloroform, through the following circumstances:—

The term chloric ether was at one time applied to the chloride of olefiant gas, or Dutch liquid of chemists. In 1837, Mr. Guthrie, an American chemist, was led by a statement in Silliman's Elements of Chemistry, that the alcoholic solution of chloric ether was a grateful and diffusible stimulant, to attempt a cheap and easy process for its preparation. This he did by distilling a mixture of spirit and chloride of lime, collecting the product so long as it came over sweet and aromatic. This both Guthrie and Silliman supposed to be a solution of the chloride of olefiant gas, and called it chloric ether. In reality it was an impure spirituous solution of chloroform.

In 1831 Soubeiran, and in 1832 Liebig, prepared a liquid by a similar process, and separated the chloroform. Dumas, in 1834,

purified it fully, and made an accurate analysis of it: he found it to be composed of twelve parts carbon, one part hydrogen, and $106\frac{1}{2}$ parts chlorine, and named it chloroform, from being analogous to formic acid in its composition, but containing chlorine instead of oxygen. From theoretical considerations Liebig termed it perchloride or terchloride of formyle,—in chemical symbols, $C_2 H Cl_3$. It is a colourless, transparent liquid, of specific gravity nearly 1500, or about $1\frac{1}{2}$ times the weight of water; it boils at 141° Fahr., the vapour having a specific gravity nearly four times that of air; it quickly evaporates at ordinary temperatures, but does not burn easily; it has a sweet taste and agreeable smell; is soluble in all proportions in strong spirit, but very sparingly soluble in water, to which it communicates its taste in a small degree.

To the best of my knowledge, from the result of many inquiries, it seems to have been introduced into this country as a medicinal agent, first in Liverpool, where, indeed, in the form of a spirituous solution, it has been more known than in any other part of the country, and from which, I believe, the knowledge of its therapeutic properties has extended. About the year 1838 or 1839, a prescription was brought to the Apothecaries' Hall, Colquitt-street, one ingredient of which was chloric ether. No substance being known there of that name having the properties of that with which the mixture had been previously prepared, Dr. Brett, then the company's chemist, in investigating the subject, found, in the United States Dispensatory, the formula for its preparation which has been noticed above, and prepared some. Its properties pleased some of the medical men, particularly Dr. Formby, by whom it was introduced into practice in this town. After coming to take charge of the company's laboratories, I found that the method of preparation yielded a product which was not of uniform strength, and sometimes of disagreeable flavour. Accordingly, I altered the process, by separating and purifying the chloroform, and dissolving it in pure spirit, by which a product of uniform strength and sweet flavour was always obtained. Thus prepared, it is much superior to specimens I have seen of London manufacture. Those members of the profession who are in the habit of using it prefer it greatly to sulphuric ether, as possessing all its remedial value, and being very much more agreeable.

The vapour of the so-called chloric ether seems to have been tried as a substitute for sulphuric ether in February or March last, but without very satisfactory results, which, indeed, could scarcely be expected, unless the vapour of alcohol possessed the same properties, it being composed principally of alcohol. When in Scotland, in October last, Dr. Simpson introduced the subject to me, inquiring if I knew of any thing likely to answer. Chloric

ether was mentioned during the conversation; and being well acquainted with its composition, and with the volatility, agreeable flavour, and medicinal properties of chloroform, I recommended him to try it, promising to prepare some after my return to Liverpool, and send it to him. Other engagements and various impediments prevented me from doing this so soon as I should have wished; and in the mean time Dr. Simpson, having procured some in Edinburgh, obtained the results which he communicated to the Medico-Chirurgical Society of Edinburgh on the 10th of November, and which he published in a pamphlet, entitled "Notice of a New Anæsthetic Agent as a Substitute for Sulphuric Ether in Surgery and Midwifery."

As an inhaled anæsthetic agent, he states that chloroform possesses the following advantages over ether:—

A much smaller quantity is required to produce the effect; it is, therefore, more portable and transmissible than ether, and, though more costly, from the smallness of the quantity required, will probably be less expensive.

Its smell is pleasant, and does not remain attached to the clothes of the operator, or exhaling in a disagreeable form from the lungs of the patient, as so generally happens with ether.

Its action is more rapid and complete, and generally more persistent, so that the surgeon's time is saved.

Most of those who have breathed both declare that the inhalation and influence of chloroform are much more pleasant and agreeable than those of ether.

The quantity required to produce insensibility is from fifty to one hundred drops generally, more or less. It is applied by pouring it into a hollow sponge or a pocket handkerchief, and holding it over the mouth and nostrils, not too closely at first, so that the vapour may be fully inhaled.

It would be out of place here to go into detail of the phenomena produced by the inhalation of these agents, or a minute examination of cases: I shall, therefore, only briefly mention what may be most generally useful and interesting.

The most essential point in the administration of these agents is to know when it has been carried far enough. Their effects vary with the quantity of vapour inhaled, and have been divided by Dr. Snow, in his treatise on ether inhalation, into five degrees. These run gradually into each other, and are not always clearly to be distinguished, but may be described as follows:—

In the first degree the person retains a correct consciousness of where he is, and what is occurring around him, and a capacity to direct his voluntary movements: the feelings are usually agreeable, often highly so; but this is not a proper state for performing

operations. In the second degree mental functions may be exercised and voluntary actions performed, but in a disordered manner; the movements are instinctive, guided by volition, though not by knowledge or reason; there may be struggling, screaming, or laughing; the patient may be tractable or obstinate; dreams occur in this stage. An operation would cause pain, though the patient might, perhaps, not remember it: this stage is not proper for operations. In the third degree there is no evidence of any mental function being exercised, and, consequently, no voluntary motions occur; but muscular contractions, in addition to those concerned in respiration, may sometimes take place as the effect of the ether, or of external impression. The eyes are stationary, the breathing is usually regular and deep, though it sometimes stops for a time, and there may be muscular rigidity: in operations there may be some flinching and moaning, but no articulate sound, and there is no recollection of what has been done. In the fourth degree no movements are seen except those of respiration, and patients are incapable of being influenced by external impressions. The eyelids fall, the eyes are fixed, the muscles are all relaxed, the face is placid and expressionless, the breathing regular and automatic, and sometimes there is snoring, a state which would be alarming if we did not know the cause of it. In this the patient remains perfectly passive under every kind of operation. In the fifth degree, not witnessed in the human being, the respiratory movements are more or less paralyzed, and become difficult, feeble, and irregular. If continued, this ends in death; yet, according to Dr. Snow, the animals always recover if the vapour is discontinued before the breathing has actually ceased.

These various stages disappear in the inverse order in which they make their appearance; that is, the third succeeds the fourth, the second succeeds the third, and the first concludes. It is to be observed that the degree of insensibility is greater in a stage when retiring than when advancing; that is, for instance, a patient might feel, while in the second stage during its advance to the third, what he would not feel in the same stage during its retiring from the third.

The proper stages for operations are, according to Dr. Snow, the third or fourth; the latter, if there be any muscular movement or rigidity in the third stage. If there is the least snoring, the operation may be commenced, and the ether should be temporarily withdrawn till the snoring ceases. The insensibility may be kept up for a long time without risk, by allowing partial recovery occasionally, by withdrawing the inhaled agent for a time.

Dr. Simpson points out the following conditions as necessary to be attended to in producing anæsthesia:—1st, perfect quiet and

freedom from all sources of excitement; 2d, avoiding as much as possible the stage of excitement by giving a full dose as quickly as possible, so as to produce the state of insensibility as speedily as possible; and, 3d, steadfastly deferring the commencement of the operation till the state of insensibility has been fully produced. It ought also to be observed that it is advisable not to administer these agents very soon after a meal, as the desired effects are not so easily produced.

Patients often recover promptly, frequently after some delay, with, perhaps, wandering of the mind, or even some excitement. Faintness and languor are not unfrequent for some time after recovery, and sometimes sickness, or even vomiting, particularly if shortly after a meal.

Anæsthesia, or insensibility to pain, by the inhalation of the vapour of ether or chloroform, has been induced, not only in surgical operations, but in neuralgia and some other painful diseases, in passing otherwise intolerable galvanic currents through tumours to relieve spasm, as in hooping-cough and in parturition.

As an example bearing on the relative merits of ether and chloroform, I may give the following case, with which I have been favoured by Dr. Imlach:—The patient, a lady, was afflicted with severe facial neuralgia, coming on every night after assuming the horizontal position in bed. Opium, henbane, camphor, iron, and arsenic, were all tried as remedies, and failed. Ether inhalations stopped the paroxysms: an ounce and a half was required, and the breath continued loaded with its smell during the day, the patient losing strength and appetite. Chloroform was then tried; it removed the pain and produced sleep, and next night it was so much better that none was required. It was repeated five times in all on alternate nights, with the use of berberine for three days. The health, strength, and appetite, became much improved, and there was no further occasion for applying the chloroform, as the pain did not return and the sleep was restored.

In regard to the experience of the sufferers, if we can so designate them, Dr. Forbes gives us the following as the result of inquiries in the London hospitals, by personally questioning fifty-four patients who had undergone, principally, capital operations:—“They were unanimous in their expressions of delight and gratitude at having been relieved from their disease without suffering. In listening to their reports it was not always easy to remain unmoved under the influence of the conceptions thereby communicated of the astonishing contrast between the external physical condition of the mangled body in its apparent tortures on the operating-table of a crowded theatre, and the really happy mental state of the patient at the time.”

Dr. Simpson also remarks, with respect to its employment in

parturition, "I have never had the pleasure of watching over a series of better and more rapid recoveries, nor once witnessed any disagreeable result follow to either mother or child, whilst I have now seen an immense amount of maternal pain and agony saved by its employment. And I most conscientiously believe that the proud mission of the physician is distinctly twofold, namely, to alleviate human suffering, as well as to preserve human life."

Such is the sketch of this remarkable discovery of ether inhalation, and such the promise of improvement in the addition to it of chloroform; a substance hitherto interesting only to the scientific chemist, but now of importance to all who seek relief from the sufferings to which their bodily constitution renders them liable.

A discovery such as this is sure to make its way, if experience should not prove that it is attended with counteracting disadvantages. All that its advocates can fairly demand is an impartial trial of its merits. The irrepressible desire in human nature to escape from pain will compel this, even though it may be opposed by the timidity, prejudices, dulness, indolence, or callousness of individuals. The practice numbers among its supporters names of the highest rank in the medical profession—men who will carry on the investigation of its applicability and suitableness to the various cases of human suffering with the ardour and perseverance which the importance of it demands, but whose judgment and intelligence will not allow them to admit these claims, except to such an extent as may be warranted by the experience arising from a judicious observation of facts, the only substantial basis on which we can ground its title to be called an important addition to the healing art.

THE MURRAIN AMONG CATTLE.

AT the monthly meeting of the Highland and Agricultural Society of Scotland, held at Edinburgh, on Wednesday, 12th inst., the secretary read a communication from the Board of Trade, to the effect that the epizootic, which was thought to be disappearing, had broken out with greater violence than ever among the horned cattle of Wallachia, and that three-fourths of those which had been spared from last year's visitation were falling victims to it. The secretary said, that though the communication just read had reference to the state of the epidemic in a distant country, the directors conceived it to be their duty to submit to the public all information conveyed to them on so important a subject, in regard to which Professor Dick, who was present, has promised to give to the meeting the results of his experience. Professor Dick then rose and made the following statement, which we give as of great interest to the public at present:—Professor Dick stated that pleuro-

pneumonia was still prevailing with great violence, and varied with the weather. It existed at present to a great extent in East Lothian, as well as in Aberdeenshire, and throughout the north. He was informed yesterday, by one of his pupils, who is in practice at Maybole, in Ayrshire, that there has only been occasionally a solitary case for fifteen miles round during the last twelve months. He considered its origin and propagation to be atmospherical, and attributable to influences to which man and the lower animals were equally exposed; in illustration of which the Professor referred to the existing epidemic in the form of influenza, under which he himself was evidently labouring; and in consequence of which the public schools have been partially closed. The disease consisted of active inflammation of the lungs, and in the pleura which covers them and lines the chest. It was attended with great danger, particularly when the pleura was principally affected; and such cases generally were fatal, unless the proper remedy was immediately applied; because, when that membrane is attacked by inflammation, being what is called a serous membrane, it very rapidly proceeds to pour out serum and lymph between the lungs and ribs; the chest fills with water, and the animal sinks and dies rapidly. Man, and all the domesticated animals, are liable to the disease, although they may not be equally affected at the same time. Horses, as well as dogs, during the present epizootic, have been less affected than cattle. The disease is not, generally speaking, so fatal in horses as in cattle, because horses, being under continual notice, were better attended to; the symptoms were at once noticed, and they were seldom lost. The same would be the case with cattle, if properly looked after; but too little attention is paid by the breeders and rearers of cattle to the health and comfort of their stocks and the symptoms of their diseases; they, at the same time, are not so much under the immediate observation of their owners. Indeed, the early symptoms very readily escape notice, because they are obscure. To illustrate the treatment required, the Professor referred to a case in Lanarkshire, where he had been called on for advice; his instructions to the smith or farrier on the property were, that he should bleed whenever he observed any cough or alteration in the milk or feeding; clean out the bowels by laxative medicine—say 1 lb. of Epsom salts, nitre, tartrate of antimony in large and repeated doses; repetition of bleeding; blistering the sides, and even firing, if necessary. After the inflammatory action has been subdued, tonics should be administered. By following this course the smith has acquired a local celebrity. It was sufficiently simple if adopted at an early stage of the disease; but if the disease has made a certain progress, no reasonable hope of success can be entertained.—*Mark Lane Express.*

MR. HENDERSON'S LETTERS. •

IN reference to the letters of Mr. Henderson on "Defective Veterinary Education," one of which is contained in our impression for last month, the second appearing in our present No., and which have likewise been published in the *Mark-lane Express*, the Editor of that journal writes—"That the importance of veterinary science to the owners of cattle and horses in this kingdom is so great, that, if the statements made by Mr. Henderson are correct, means must be taken to remedy the evil. *The establishment of a second school or college would, in all probability, have the desired effect.*"

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—Hon.

AN ESSAY ON THE DISEASES OF THE JAWS, AND THEIR TREATMENT. By LEONARD KOECKER, Surgeon-Dentist, &c., New Edit. *With copious Notes and Appendix.* By T. B. MITCHELL, M.D., Surgeon-Dentist. Churchill, London. 8vo. pp. 94.

THE maladies of the jaws—though there are times when, in animals more than in human beings, they may be regarded as independent of the teeth—for the most part belong, in their early forms in particular, to the province of *dentistry*; and therefore it is that "the dental surgeon has the best and most extensive practical opportunities of observing and watching these maladies through their different stages." Diseases of the teeth, in horses, dogs, and cattle, as compared with the catalogue human medicine exhibits, are few, uncomplicated, and readily remediable. Leaving out of mention such evils as, now and then, not often, arise from dentition, horses' dental disorders may be comprised under the headings—*inapposition, fracture, supplemental or wolves' teeth, caries.*

At the middle and advanced periods of life horses are very apt, from irregular and sidelong motions of the jaws during the act of manducation, to wear the surfaces of their molar teeth slantingly, and so much so as in the course of time to give rise to declivities in the crowns of those teeth, unfitting them for the purpose of grinding the food, the consequence of which is, that the aliment either passes into the stomach imperfectly masticated, or else collects together into a sort of pellet—*cul*, as it is called—and becomes lodged in a pouch formed within the cheek, outside the

molar teeth. The evil becomes readily remedied, generally speaking, by the judicious use of the tooth-rasp.

Fracture of the teeth, rarely—hardly ever, in their sound condition—happens; but fracture of the jaw from injury, is a case which every now and then presents itself, and with it the teeth commonly become involved.

What is most apt to affect the jaws, however, is *caries* of the teeth, or disease communicated from them to the lining membranes of the sinuses and cancellated cavities in their interiors.

“Writers on dental surgery have not failed to point out the morbid effects of the diseases of the teeth or the osseous structure of the jaws; but they have been content to grapple with these effects in one or two forms only. “Abscess of the Antrum,” “Parulis or Gumboil,” and “Epulis,”—the simplest form of the sarcomatous tumour, are sometimes mentioned in systems of dental surgery; but, uniformly as distinct and primary diseases, instead of symptomatic affections, all equally referrible to the same causes, namely, the “idiopathic diseases of the teeth and sockets.”——“A vesical calculus may give rise to various (symptomatic) affections of the neighbouring parts, and connected organs; but in an etiological point of view, the disease, whatever the symptoms, is still *calculus*, and the sole correct treatment consists in the removal of the lithic deposit,”—together with, we would add, the lithic diathesis. “Thus it is with the diseases of the jaws. In their etiology they are identic, and on this identity is founded their only successful curative treatment.”—*Editor's Preface*.

That fundamental science in medicine must have for its principal object the study of primary causes will not be questioned by the man of reflection, no more than that the jaws and other vicious parts have been treated for pains and aches, and inflammations, and swellings, when the teeth were the parts that ought to have been looked to: this last, in fact, is a remnant of old surgery that has been pretty well exploded from modern practice, the folly and absurdity of which, it would appear from Dr. Mitchell's preface, Mr. Koecker has been very instrumental in exposing.

The observations the running over of the work before us have elicited, will shew how little of it can be made applicable to such animals as horses, dogs, &c. There is, however, one division of the “Essay” to which we may with advantage direct the attention of the veterinarian; and since this is but a short one, and our reader may feel desirous of judging for himself of the applicability of it to veterinary practice, we will transcribe it into our pages. The heading of it is—

“Of Osseous, Fibro-cartilaginous, Sarcomatous, Fungous, and Osteo-Sarcomatous Tumours and Excrescences of the Jaws.

“Sometimes, from some accidental excitement, or from a peculiar irritation produced by the osseous structure upon the periosteum, the membrane lining the cavity of the jaw, or the external periosteum and gums, during the progress of the diseases already described, large tumours or excrescences are formed on these parts. These tumours are either of a soft, fleshy, cellular structure, or of a fibro-cartilaginous or osseous kind, forming various sorts of exostoses, which seem to be equally common to both jaws. When they occupy the upper jaw, they may sometimes be found to enter the nose, and even the orbit of the eye; and by their gradual increase the cheeks become very much swollen, as well as all the parts involved, great deformities of the face, distortions of the nose, the eyes, and other parts, being the necessary consequences.

“In the under jaw these tumours are often of a spongy or osteo-sarcomatous nature, and particularly disposed to extend to an immense size; sometimes they are accompanied by the formation of polypi in the ears, and discharges of matter from these organs. Notwithstanding their very formidable appearance, however, these diseases are neither more dangerous nor less tractable, under proper treatment, than those of the upper jaw.

“If, however, under all these various complications, these maladies are not properly and completely arrested in their progress, they are liable to become cancerous, and thus terminate fatally; or, by gradually weakening the constitution, and predisposing it to the influence of other diseases, eventually assist in destroying the unhappy victim.”

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of December 29, 1847.

QUARTERLY MEETING.

Present—the SECRETARY, Messrs. HENDERSON, PERCIVALL, GODWIN (Birmingham), ARTHUR CHERRY, ERNES, CHERRY sen., and WILKINSON.

THE PRESIDENT being absent in consequence of having met with a severe accident, Mr. HENDERSON, the senior Vice-President, occupied the Chair.

The minutes being read and confirmed,

There appeared to be no question for the consideration of the Board. A general discussion followed on various points of progressive business, but which it is not necessary to notice, it being generally understood that the next meeting would be an interesting one, as there would be the consideration of two important notices, and other business.—Adjourned.

THE
VETERINARIAN.

VOL. XXI,
No. 243.

MARCH 1848.

Third Series,
No. 3.

ABSTRACT OF THE CHARTER

APPLIED FOR BY THE PRESIDENT AND GOVERNORS OF THE
ROYAL VETERINARY COLLEGE OF LONDON, AND THE
PRESIDENT AND DIRECTORS OF THE HIGHLAND AND
AGRICULTURAL SOCIETY OF SCOTLAND.

THE preamble sets forth, that the application is made on the part of the "president and governors of the Royal Veterinary College of London, and the president and directors of the Highland and Agricultural Society of Scotland;" that "the Royal Veterinary College of London and the Veterinary College of Edinburgh have been established for many years, and are the only schools for the education of students of the veterinary art;" and goes on to recapitulate the principal parts of the preamble of the charter already granted to the veterinary profession. This is followed by a plea for exemptions:—"That in consequence of practitioners of the veterinary art not participating in the privileges and exemptions which have been granted to the medical and other professions, much injury has arisen to themselves as well as loss to their employers;" and, therefore, they "submit that considerable advantages would accrue to our subjects generally by enabling veterinary surgeons to possess privileges from which they have been hitherto excluded."

The next clause sets forth that advantage would accrue from the connexion with the Highland and Agricultural Society of Scotland; but how this is to arise is not pointed out.

Clause 3, acknowledges the granting of a royal charter of incorporation on the 8th day of March, in the seventh year of the reign of Her Most Gracious Majesty.

Clause 4, sets forth, that, up to the time of the granting of the said charter, "the management of their respective schools, from which *such great benefits* have accrued to the public, was in their

own hands;" and complains that the present charter exercises "uncontrolled power over the said schools;" and that the "petitioners are in no way represented in the said body politic and corporate, and that the said charter, and the bye-laws made in pursuance thereof, contain clauses and rules which our petitioners consider detrimental to the interests of the said colleges and to the advancement of the veterinary art;" and further prays, that a charter of incorporation be granted to the certificated members of the said schools, under "the name and title of the Royal Veterinary College of London and Edinburgh;" and "that the veterinary art might henceforth be recognized by law as a profession."

Clause 5, recapitulates the former in the usual recitative phraseology of the law, and may be looked on as the first clause in the body of the proposed charter.

Clause 6, proposes the appointment of a council, and regulations regarding general meetings; but goes on to add, "that the professors, being veterinary surgeons, to be appointed by the two bodies petitioning respectively," and "such other veterinary colleges as may be appointed and recognized by sign-manual, and to be approved by the veterinary board afterwards mentioned, *shall be, by virtue of their respective offices, members of the said council*, so long as they hold their said offices, but no longer; and that the council shall consist of thirty members, and that there shall be one president, two vice-presidents, and one secretary, elected by the said council out of their own body; and the members of the council, with the exception of the said ex-officio members, and of the first president, who is appointed by these presents, shall be severally elected and appointed in manner hereinafter mentioned."

Clause 7, appoints Professor William Sewell as the first president.

Clause 8, directs, that the council shall be elected from the body politic and corporate.

Clause 9, directs, that the first general meeting shall be held at the Royal Veterinary College, or elsewhere in the county of Middlesex; and that the first president, or, in case of his death, the petitioners, shall fix the day and hour for holding the same.

Clause 10, directing the calling of the general meetings, is a re-script of the present charter, except that the general meeting be held in June instead of May.

Clause 11, directs the election of members of council, exclusive of the ex-officio members, to take place at the annual general meeting.

Clause 12, directs, that the president, vice-presidents, six members of council, and the secretary, go out of office on the day of the annual general meeting.

Clauses 13, 14, 15, 16, and 17, directing the manner in which the members of council are to be elected, providing for the going out of office of six members annually, and regarding the filling up of vacancies, is a rescript of the present charter, excepting that the continuance in office of a member of council will be *five* instead of *four* years.

Clause 18, directs, that the president, vice-presidents, secretary, and members of council, shall still be considered and act as official members of the council until the termination or adjournment of the annual general meeting.

Clause 19, directs, that the voting for members, &c., be taken by ballot.

Clause 20, directs, that members of the said body politic and corporate shall "vote in person, except those residing more than twenty miles from the place of meeting, who may vote by proxy in the appointment of members of council."

Clause 21, directs, that any president, vice-president, or member of council, may resign his office if so inclined; and that any general meeting specially called for the purpose, "may remove any president, vice-president, or member of the council, NOT BEING AN EX-OFFICIO MEMBER, for misconduct or other reasonable cause."

Clause 22, directs, that the meetings of council shall be convened by the secretary.

Clause 23, directs, that the first council shall be convened within one month after the general meeting, at which one president, two vice-presidents, and one secretary, shall be appointed.

Clause 24, directs, that any secretary or treasurer may be removed by the council from his office.

Clause 25, directs the manner of voting at the general meeting to be by ballot, and by proxies entitled to vote.

Clauses 26 and 27 relate to the presiding at the general meeting and meetings of council, and regarding the entering of minutes.

Clause 28, directs, that such matters as may be entered and duly signed in the minutes are to be "binding and conclusive on the said body politic or corporate," *except* "such matters requiring approval by the veterinary board as hereinafter mentioned."

Clauses 29, 30, 31, 32, 33, and 34, give power to the council to appoint officers, &c., and the management of the general affairs of the body politic and corporate, except as hereinafter mentioned.

Clause 30, places in the hands of the council the power of fixing the time and place of meeting of the council, and also for examining students, and for regulating the nature and extent of such examinations, and the appointing of examiners, and fixing "the sum or sums of money to be paid by such students, either previous

to their examinations, or upon their admission as members ;” and “generally touching all other matters relating to and connected with the said body politic and corporate ;” and “to alter, suspend, or repeal, and to make new orders, rules, and bye-laws, in their stead, as the council shall think most proper and expedient.” All these clauses are rescripts of the present charter.

Clause 35, directs, that the fee for examination and admission, inclusive, shall not exceed the sum of five guineas, except as hereinafter mentioned.

Clause 36, directs, that all orders, rules, or bye-laws, be reduced to writing, and the common seal affixed thereto.

Clause 37, directs, that before any order, rule, or bye-law, or alterations in repeals therein, can be made, notice must be given thereof at a previous council; and that “copies of the same must be suspended in the common meeting-room of the council, and in the lecture-room of the Edinburgh College, during the space of two calendar months previous to the meeting of the council at which it is intended to propose the same,” and a special meeting called both for the consideration of and confirmation of the same.

Clause 38, regulates the affixing of the college seal.

Clause 39, directs the establishment of a board, to be styled the “Veterinary Board,” and that this Board be composed of *one* of Her Majesty’s principal Secretaries of State, or some person to be by him appointed; the *president* or one of the vice-presidents, and *three* governors of the Royal Veterinary College of London; and the *president*, and *three* members of the Highland and Agricultural Society of Scotland; the *principal veterinary surgeon* to the army; the *veterinary examiner* of the Honourable East India Company; the *senior professor of each* of the said colleges of London and Edinburgh; and the president and vice-presidents of the to be formed new college.

Clause 40, directs, that the Veterinary Board shall determine the time and place for their meeting, and that their acts shall be decided by vote, and that five form a quorum.

Clause 41, provides, that the Veterinary Board shall appoint a secretary, and that minutes be kept of their proceedings; and which minutes, signed by the president, shall “*be binding and conclusive on the said body politic and corporate, AND ON ALL THE MEMBERS THEREOF.*”

Clause 42, directs, that the Veterinary Board may require returns to be made from the council “in such form, and including such particulars, as they may think fit respecting the examinations of students ;” and, further, that any secretary of the said Veterinary Board may be deputed, or for any member of the said Board to be present, at any of the said examinations.

Clause 43, directs, that the said Board may, with the consent of the "council, vary, alter, or add, to the nature or form of the examinations hereinafter directed, as they shall see fit."

Clause 44, directs, that no order, rule, or bye-law, to be made by the council, nor any appointment of a member or members of the board of examiners, "shall be of any force until it has been laid before and approved of by the said Veterinary Board."

Clause 45, directs, that a board of examiners shall be formed, and the professors of the Royal Veterinary College of London, and the professors of the Veterinary College of Edinburgh, the principal veterinary surgeon to the army, the veterinary examiner to the Honourable East India Company, shall be ex-officio members thereof; and that the council shall elect from those who are or shall have been public teachers in the medical profession eight persons, four of which are to be resident in London, and four to be resident in Edinburgh or Glasgow; that the council shall elect from the members of the body politic and corporate eight other persons, four of such members to be resident in England, and four to be resident in Scotland.

Clause 46, directs, that on a vacancy by death, or otherwise, of a member of the board of examiners, such not being caused by the death or resignation of *an ex-officio member*, the council shall fill up such vacancy, but *subject to the approval* of the Veterinary Board.

Clause 47, directs, that every student, prior to examination, shall have completed his twenty-first year.

Clause 48, directs, that any person who shall have obtained a diploma from any of the universities, or from any public veterinary school in any of our colonies or in foreign parts, or from any of the Royal Colleges of Physicians or Surgeons, or the Honourable Company of Apothecaries of London, Edinburgh, or Dublin, shall produce certificates of having attended one of the recognised veterinary colleges of not less than *one* sessional year.

Clause 49, directs, that those students who shall not be qualified under the previous cause shall study for not less than two sessional years.

Clause 50, directs, that at the expiration of two years after the date of the proposed charter, students shall be required to serve an apprenticeship of not less than *two* years with a member of the body politic or corporate, or of not less than *three* with a member of the Royal College of Surgeons, or Honourable Company of Apothecaries of London, Dublin, or Edinburgh, or of the Pharmaceutical Society of London; or who shall have been established as a practitioner of the veterinary art for not less than three years before the granting of the said proposed charter, although not having

a certificate of qualification from either of the colleges, shall, in each case, be required to attend not less than *two* sessional years at one of the recognized schools.

Clause 51, that all other persons who may enter as students, not coming under any of the previously enumerated conditions, shall be required to attend at one of the recognized schools for not less than *three* sessional years.

Clause 52, directs, that the fee for examination and *admission*, together with the required certificates, shall be delivered to the secretary of the council, at least fourteen days previous to the day of examination.

Clause 53, provides, that the board of examiners may direct a candidate found not competent, to return to his studies for a period of not exceeding six months; and such candidate shall be entitled to a second examination without the payment of any farther fees.

Clause 54, directs, that if, on a second examination, a candidate shall not be competent, he shall not be entitled to another or any succeeding examination, without the further payment of a fee of five guineas for every such additional examination.

Clause 55, vests the property of the body corporate and politic in, and places it under the control of, the council.

REPLY OF THE COUNCIL TO THE PROPOSED CHARTER.

To the Right Honourable Sir GEORGE GREY, Bart.

Her Majesty's Principal Secretary of State.

1. THE Memorial of the President and Council of the Royal College of Veterinary Surgeons, incorporated by Charter granted by Her Most Gracious Majesty on the 7th day of March in the Eighth Year of her Reign,

Humbly sheweth,

2. That your Memorialists have seen with surprise the Petition for and draft of a new Charter submitted to the consideration of Her Most Gracious Majesty, and prayed to be granted to "the President and Governors of the Royal Veterinary College of London, and the President and Directors of the Highland and Agricultural Society of Scotland."

3. That your Memorialists view this application with regret, mingled with pain, that noblemen and gentlemen should have again

reiterated statements which have long since been explained and refuted.

4. That the allegations contained in their Petition, and the general tendency of the proposed Charter, have been, for the most part, answered at some length in two former memorials, bearing date 22d July, 1844, and 4th November, 1846, to which we respectfully beg leave to draw your attention.

5. That this application has been made by "the President and Governors of the Royal Veterinary College of London, and the President and Directors of the Highland and Agricultural Society of Scotland" *only*; that large and influential chartered body, the Royal Agricultural Society of England, having refused to join in the application.

6. That the grant or grants of public money made to the Royal Veterinary College or School of London, alluded to in the Petition and draft of Charter, have ceased for many years; and so far from there being evidence to shew that such grant or grants were made to that Institution as a public body, the Governors have always maintained that they are a *private and uncontrollable one*.

7. That the general anatomy and pathology of *cattle, sheep, swine*, and other domesticated animals, were not taught in this school, nor were **such** animals admitted as patients, until just prior to the granting of the present Charter, and then only in consequence of a grant of money from the Royal Agricultural Society of England for this particular purpose; though the structure and diseases of these animals were, by the laws of the Institution, passed in the year 1791, especially directed to be taught.

8. That this grant from the Royal Agricultural Society of England has been since directed to be withdrawn, in consequence of the defective results obtained.

9. That these important branches of knowledge are still but very imperfectly investigated.

10. That the condition of the Veterinary College, or School, of Edinburgh, as regards the means for the instruction of pupils, was and still is in a similar position.

11. That the course adopted in the tuition of pupils has long been the subject of complaint on the part of the members of the veterinary profession, as well as of the public at large.

12. That attempts have repeatedly been made, and more especially of late years, to induce the Governors of the Royal Veterinary College, or School, to establish a better and more extensive system of tuition, but without effect.

13. That, in the year 1840, an application, signed by upwards of 300 members of the veterinary profession, was made to the Governors of the Royal Veterinary College, or School, to memorialize

Her Most Gracious Majesty for a Royal Charter of Incorporation ; but they *most unceremoniously refused*.

14. That the body of veterinary surgeons, thus finding that the Governors of the Royal Veterinary College, or School, would neither co-operate with the veterinary profession at large in removing evils and improving and extending the curriculum of study, nor make any attempt thereto of themselves, were obliged, from the urgent necessity of the case, to take more effectual steps for their obtainment.

15. That, in consequence, a public meeting of the veterinary profession was convened, at which meeting a Committee was appointed to take proper steps for petitioning Her Most Gracious Majesty for a Charter of Incorporation.

16. That, at an interview between the Professors of the Royal Veterinary College, or School, and the Solicitor to that Institution, and certain members of the veterinary profession, the co-operation and assent of the Governors were stated by their Solicitor as ready to be given, provided the Committee made certain alterations in the petition then proposed to meet their wishes.

17. That the Committee acceded to this request, and that the portions thus introduced by the Solicitor to the Governors *are those which, in the present application, form the principal subject of complaint*.

18. That, subsequently, the names of Messrs Spooner and Simonds, professors or teachers at the Royal Veterinary College or School, were added to the Petition, at their own special request.

19. That the proposed Petition and draft of Charter were submitted to the consideration of the solicitor to the Royal Veterinary College, or School, and his opinion taken thereon.

20. That the clause excluding the professors or teachers from becoming examiners of their own pupils was inserted by the direction of the legal adviser to the Crown.

21. That, after the proposed draft of a Charter had been corrected by the advisers to the Crown, it was submitted to the solicitor to the Royal Veterinary College, or School, at his own request, and by him stated to be improved thereby.

22. That the allegation on the authority of the professors, that surreptitious alterations were made in the draft of the Charter, has already, at a meeting of a deputation of the Governors appointed to confer with a deputation from your Memorialists, been distinctly withdrawn.

23. That all necessary expenses and charges of obtaining the same have been borne by the body of veterinary surgeons, without any aid whatsoever, either pecuniary or otherwise.

24. That the body of the veterinary profession never sought to

interfere with any vested or other rights, whether private or public, but, on the contrary, did every thing in their power to support and uphold the existing schools.

25. That your Memorialists, since the granting of Her Most Gracious Majesty's Charter of Incorporation, have uniformly acted on these views and principles; that their only object has been to obtain a more perfect curriculum of study, and the distributing throughout the kingdom better qualified practitioners to meet the increasing wants of the community.

26. That your Memorialists are surprised to find that the Royal Veterinary College or School, which is a *private Institution, supported by voluntary contributions, but so exclusive that it will not allow a veterinary surgeon to become a subscriber*, and the Veterinary College or School of Edinburgh, which is the *sole property of one individual*, should claim as vested rights the continuance of powers which they only obtained by *usurpation*.

27. That your Memorialists have never made any secret of their wish to occupy the same position towards the schools of education as the College of Surgeons does to the medical schools, which position they occupy by the present Charter.

28. Your Memorialists are fully sensible that the onward progress of veterinary science has been greatly retarded, and numerous grievances of long standing have been mainly perpetuated, by an erroneous system, which the present Charter has put an end to.

29. That, as your Memorialists are gradually exercising those powers with which they have been entrusted, it will be found that there is no necessity for another Charter. That the character and usefulness of the veterinary profession will be raised by the measures already in operation, and that there is no ground for the indulgence of those needless alarms expressed to Her Majesty by the opposing parties.

30. That the allegation, that the members of the veterinary profession have no means of educating students, is both *unjust* and illiberal. That the materials for the establishment of a school of instruction have been long in existence; the only reason why they have not been rendered available having been wholly from a desire not to interfere with the schools already existing.

31. That for these reasons, and because the veterinary profession are fully satisfied with the present Charter, your Memorialists pray that you, Right Honourable Sir, will not advise Her Most Gracious Majesty to grant the application now made.

And your Memorialists, as in duty bound, will ever pray.

(Signed by the President on behalf of the Council.)

OBSERVATIONS ON THE CAUSES OF DECLINE IN OUR STOCK OF GOOD HORSES, ON BREEDING, AND ON QUEEN'S PLATES AND RACING.

By W. J. GODWIN, M.R.C.V.S., Birmingham.

To the Editor of "The Veterinarian."

Sir,—YOUR last Number contained some remarks by Mr. Goodwin, Veterinary Surgeon to the Queen, on Breeding of Horses, and on Queen's Plates, as connected therewith (apparently called forth by a pamphlet on the same subject by Mr. Cherry, Principal Veterinary Surgeon to the Army), in which that gentleman appears to look upon the make and shape of a horse as no criterion whereby we may judge of his qualifications for racing or other purposes, and to consider it inconsistent for breeders to turn their attention to strength, shape, temper, action, &c.; adding, that "neither can Mr. Cherry nor any other man in the world give an estimate of the character of a horse by looking at him." Now, if he means, pick out a winner of the Derby by such mode, I agree with him, otherwise I must dissent from him in opinion; notwithstanding, I am ready to admit that Nature, in her vagaries, will often lead us wide of the mark. And since this is a subject entertainable by veterinary surgeons, I cannot refrain offering my views thereon; and especially am induced so to do, seeing they differ materially upon some points from an authority which, I fear, might be considered as laying down a principle, an established fact, should such be allowed to pass without comment.

I shall attempt to shew that the different breeds of horses in this kingdom, employed as hunters, carriage, or cavalry horses, or as hacks, are fast degenerating; and that the system adopted in the present day of breeding for the turf to contend in short distances, and with light weights, has a tendency to produce this effect, by reducing the necessity of the race-horse being the large powerful animal that, I contend, is advantageous to this or any other country, to improve the breed of horses for general purposes. I am of opinion, with Mr. Cherry, that some means should be adopted by Government to enable farmers and other breeders of horses to obtain the use of stallions of a good class, free from defects likely to be entailed on their progeny; and that, if some plan for this purpose is not employed, the breed in this country will be on the decline, if it be not at present. Look at the names of first-rate stallions in days gone by, and find, if you can, any common horse in appearance whose descendants have been successful to the

second generation, or whose blood has been sought by breeders; and then observe the animals that form the entries for our great handicaps of late years. Take about 20 out of the 130 entries for the Chester cup, and behold what a stud, except as race-horses, from which a share of the future stock of this country is to be produced. Still, most of them are good enough to win, in their turn, some moderate stake during their career, either by getting favourably handicapped, meeting a field of the same class, or some other fortuitous circumstance resulting from the present system of racing. As regards the scarcity of hunters, I feel confident that "Pegasus" is in error, when he observes in *Bell's Life* of the 6th instant, in refutation of Sir Harry Smith's assertion, "that it would be difficult to obtain 500 hunters, if required, for the use of the cavalry," that 5000 could be easily bought, if wanted. Pegasus has evidently not been in the market for the last few years, or he would know better; and, moreover, would be satisfied that the higher class of horses are every year more difficult to be found. Ask Elmore, Smart, Kench, Anderson, Collins, or any other dealer in the best description of horse, the difference in expense incurred between now and some few years back to find them; and I feel little doubt but they would confirm my statement, that they at the present day spend more money in travelling, and paying others on the look-out for them, than some years back would have half purchased them. I am of opinion that none of them would undertake a contract to supply 500 well-bred, clean, sound horses, under eight years old, perfect as hunters, and equal to fourteen stone, with one month's notice at the commencement of the season, at 150 guineas each. They are not to be found without great exertion, and a perfect knowledge of the whereabouts of almost every hunter of character in the kingdom; and, after that, the judgment is required to select the class of hunter for the different countries they are afterwards to perform in; and this latter forms no small share of the task, whether constructed for the speed and flying propensities so essential in Leicestershire, Northamptonshire, or the best part of the Warwickshire country; for the compactness and strength so much better adapted for the deep country about the Worcestershire and Warwickshire woodlands; or possessing those qualities suitable for the Surrey hills, or the Gloucestershire walls, &c. There are no men more alive to the scarcity of such animals than the farmers in Shropshire, Cheshire, Warwickshire, Northamptonshire, and Lincolnshire, and who, at the Stourbridge, Rugeley, Rugby, Horncastle, and Lincoln fairs, were the purchasers of the well-bred, good-looking, three or four year olds, with them to undergo his years of tuition and probation, and, if not before sold to some neighbouring

fox-hunter, to come again to market as a best-priced hunter. But, how many horses come into a fair at the present day worthy being called hunters? Very few, I can safely assert; and most of these are wanting in some respect, either as regards performance or soundness. Dealers, who have to buy horses of character or quality, have to seek them in their owners' stables; and every man who has bought a few horses knows to what disadvantage he stands as regards the prices to be paid, when the owner has to be told, "You have heard he has a good-looking horse" (and this bit of flattery is necessary in many instances to get the chance of seeing him) "and would not object to sell him," for none place themselves in the position of *wanting* to sell a good-looking one now-a-days: it is something to get a refusal of him at his own price. I fancy this state of affairs augurs much of the scarcity of the animal.

I recollect when Shropshire, Warwickshire, Yorkshire, and Lincolnshire, were wont to supply the majority of the hunters used in this kingdom, and I have but little doubt but at the present time more hunters are brought from Ireland to the English fairs than come to them out of our own country. Indeed, I think Ireland is getting an advantage over this country in the breed of horses, from the circumstance that mares for common purposes of breeding cannot here be sent to a first class stallion, in consequence of the price being objectionable; it having become the fashion for the best stallions to cover thorough-bred and other mares at the same price, say from 10 to 25 guineas each; and these horses not being studded at every market-town, there is an additional expense for keep and travelling expenses, and the breeders of half-bred horses will not pay such sums. The result is, being under the control of his pocket, he loses all desire to exercise his judgment in the selection of a horse, and sends his mare to the nearest and cheapest horse in his neighbourhood. There are, it is true, owners of good horses who allow these mares to be served at half price, whose liberality ought to be considered a national boon; but then even it comes high.

It may be argued, that farmers are not so disposed to breeding horses as formerly. This is an instance of an evil working its own remedy. The best mares for these purposes having been taken out of the kingdom by the tempting prices offered for them, they have bred from what they could obtain at a less sum; and the result has been, that not one colt in twenty has turned out good enough to pay his expenses at five years old, which was formerly considered the best age to bring colts for sale (although now four-year-olds are very readily sold to the same hands); and thus, finding so little hope of a remunerating return, breeders decline practice. In other instances, the depreciated value of the colt has been

in some cause of unsoundness that has not been discovered by the breeder until offered for sale, and which has, perhaps, existed from an early period of his life.

A breeder should be careful to look to any defect of this kind in mares, and particularly to watch their produce, to see if any like cause exist in them; otherwise, he may, at a ruinous expense, stock himself with a defective stud of young horses, and this to be discovered to his cost not until he comes to sell them. I need not enforce the especial necessity of paying attention to the stallion selected. If a farmer be not judge enough himself in these matters, let him not grudge a fee to some competent veterinary surgeon; it will be money well laid out. By many, action is not noticed sufficiently in the selection of horses for breeding purposes. Since "like is apt to beget like," I would never put a mare to a bad goer. The difference in the value of a common horse is equal to 50 per cent; but one of first quality, in other respects, enormous. Picture yourself on the look-out for a first-rate horse, either as charger, for the park, or harness. Walking through a fair, the very animal presents himself, coming into the town for sale. You get the refusal of him; price turns within your own estimate: he is fed, dressed, and pulled out for your inspection. After an anxious hour has passed, mark your disappointment at discovering he is a bad goer. You feel you would not buy him. Then, whose disappointment is greatest? Yours, or the breeder's, who has never turned his attention to this part of his favourite's qualities, until, as in the case of unsoundness, he is reminded of it by the otherwise would-be purchaser? On the other hand, a dealer, knowing the nag you require, and believing, from your knowledge and love of action, he has what will tempt you, asks you to allow him to shew you one in the stable. You reply, on seeing him, "It is useless; he is not quite good enough." Still, from the desire of the dealer, you consent to have him out, more to satisfy him than yourself, when, to your astonishment, from his action, you cannot leave him. The price? Half as much again as you valued him at. Still, you must and will have him. Why should not the farmer be in this position? He cannot insure a good goer, it is true; but he should adopt every means possible to attain one, and if he prove not, then sell him young, for some inferior purpose. I would recommend the same, likewise, in case of existing unsoundness, since a serious per centage will have to be taken from the amount sold for as "sound," should he be certified to the contrary, when he comes to be overhauled by the veterinary surgeon, a scrutiny from which few escape when about to leave the dealer's hands. Many a young horse intended for harness might, under these circumstances, be put into the team at two or three years old, and thus

earn his living at a time when his expenses are most serious, and be sold at five years old to pay well for his keep, up to the time he began to work, for van horses, which are much in request just now, for the purpose of delivery from, and collecting goods to, railway stations.

No bad goer or unsound colt is worth holding till four or five years old, unless he can earn his keep. Why has the dealer the good goer? Because he is on the look-out for such, and takes care to purchase, or have him promised to him, or some one employed by him, before he has reached the place of sale. It is astonishing what horses suffer, by comparison, when brought to market for sale. There are few persons who can carry those niceties of form in their eye that constitute what is termed *quality*, when deprived of the advantage of comparison, except the experienced dealer; and many feel astonished at such a man refusing to purchase what is considered by the breeder a fine cleanly-looking horse, until he comes to be compared with others, brought perhaps by themselves to a fair. Through comparison, the secret becomes divulged, it not being the practice of a respectable dealer to disparage what he does not intend to purchase.

It is true, foreigners take a vast number of entire stock out of the country; and I am of opinion it would be better if a limit were put to this practice, and so increase the trade for the foreign market, and enforce the breeding of them ourselves. But if they take the material, they not only produce what they require, but this country is deprived of the means of so doing, and thereby is the supply rendered scarce in cases of emergency. Further, they now take the very description of animals so much required by ourselves, as country stallions, their object being undoubtedly not so much the production of race-horses as the improvement of their studs. For general purposes, they are also careful in selecting their purchases free from any defect likely to be entailed on their progeny, or any natural formation that would predispose to such, both in mates and sires. It is to this weeding our cleanly sound mares out of the country, and leaving us the refuse, that I attribute the increased number of horses now with spavins, curbs, &c., more than was formerly the case; a circumstance that, in my opinion, calls for the especial consideration of Government.

I shall now make some observations on the Queen's Plates and Racing, as it has had, and is likely to have, influence on the breeding of horses for the purposes previously mentioned. I do not think that these (racing) prizes were given solely for the purpose of increasing the amount of sport at different meetings: if so, the new scale of weights, and alteration in distance, will bring about—indeed *it has* produced—the desired effect. On the contrary, I

have always looked upon them as being established for the purpose of causing the race-horse to be bred with the power to carry weight, and as an encouragement of adherence to that blood possessing the quality of endurance in the highest degree; and, as the weights were previous to the late alteration, undoubtedly such prizes stood as a reward to the best horses in the kingdom possessing these qualifications. And as, in former days, before such large stakes as are now raised by private subscription were run for, the amount bore a fair proportion with the sums contended for in other stakes, and then had the effect of bringing together moderate fields; but, as the disproportion in these prizes to other stakes increased, so did the fields become reduced for the royal plates, it being not uncommon for a horse to walk over or meet with some insignificant competitor for a succession of these prizes. Even then, however, the prize went to the proper purse, that of the owner of the horse best qualified for these races, although the public felt some disappointment for want of competition. Now, I am an advocate that these royal prizes should be continued, not only on account of stamping the truly national sport of horse-racing with the highest character; but now knowing that, if placed upon a proper footing, they will answer the end intended, and which, in my opinion, is a material one. That the shortening the distances and lowering the scale of weights will produce the greatest amount of sport, as the prizes now stand, I do not doubt; but, proceeding with this view alone, will, I am convinced, give a disposition to the breeding of the race-horse for speed only, consequently leave unregarded the size and power necessary to carry weight, and particularly since most of the great stakes are handicaps. A weed of a horse, possessing speed, has many opportunities of winning a large stake, consequently there will not be that inclination to produce a more powerful animal, the means of doing which come more expensive; and therefrom arises a disposition or bias to breed from parents destitute of these qualities, if no further encouragement is held out to promote this end than now exists, viz., that of breeding the description of animal destined for the general improvement of the race.

It would be folly to suppose that the present system of racing could be changed entirely. The object, as it now exists, is to increase the amount of speculation more than to improve the breed of horses, which, as connected with the turf, can only be effected by increasing the amount of these plates, and keeping up the weights. The distance (four miles) of many of the old plates I think rather too far with the higher scale of weights; nor do I approve of the system of running heats. If there be any cruelty in racing, as some choose to assert, it is in this, and this only. How often have

I seen horses come to the post, to contend for a third or fourth heat, scarcely able to gallop from exhaustion through their previous efforts! I no more desire to see this than I admire seeing a bumpkin shaking and spurring a tired horse in the hunting field, or a beaten horse, whose chance is run out, in a steeple-chase.

I would propose to increase the amount of the Royal Plates, by removing them from places where the spirit of racing is not upheld by subscriptions from the inhabitants (who participate in the profit and amusement derived therefrom) to an extent to secure a proportionate amount of stakes to those contributed in other places, or, in other words, from where racing is not conducted and supported in its best and most spirited style; and by adding to the same prize, where such is the case, and so increasing the amounts instead of the number of the prizes. Suppose twelve Royal Plates of five hundred pounds each, one three mile heat, weights high, but varying according to the severity of the course over which it is run, with a penalty of 7 lbs. for winning each stake in the same year; thus giving as many horses as possible a chance of winning one of them. This would be something like a reward for such animals being bred, and would enable the owner of a good horse to secure a fair share of the public money, although his means might be too limited to have engaged him heavily, as the more opulent proprietors of race-horses would have done at the age most of our great stakes require, and which, in most instances, as in the Derby, Oaks, and the great Produce Stakes, is before the merits of the animal can be tested. Out of this, I firmly believe, would arise a desire to breed an animal suitable for the purpose; and, since there are other prizes of similar amount, where speed only is of importance, the retention of this property would always be considered, and carefully studied to be retained, and would, if effected, be the *ultimatum* of our object for the amelioration of that race of animal, the British race-horse.

Since it is from our thorough-bred stallions that our hunters, chargers, carriage-horses, and hacks are descended, the best formed and biggest are those which should be sought as sires for this purpose, there being a natural proneness to the primitive type, which is much less than the present race of blood-horses. When, however, I speak of a *big* horse, I do not mean the high, long-legged, narrow animal, but one in which the osseous system is capacious enough to afford sufficient space for chest, large levers, and attachment of a corresponding bulk of muscles; such a form that not only suits for racing, but, with slight modifications, almost any other purpose, from the hunter to the hack.

In breeding for speed only, that is, when powers of endurance are not kept in view, I am of opinion one of the most desirable

qualities we can possess in horses for general purposes, may be dispensed with in some degree, and in some instances to advantage; hence one reason why breeding such animals detracts from the essential qualities of the horse for useful purposes: I mean that form of body and chest known among horsemen by a *strong constitution*. How many good horses have I known on the turf whose legs have been sacrificed by the severe work requisite to prepare them; whose career, otherwise, would probably have been a long and brilliant one! Take Launcelot, Melbourne, Meteor, and many others I could mention, as instances: still, they were the description of horse required for the general improvement of the race, and were race horses as well.

I do not think that Mr. Goodwin argues fairly when, taking the exceptions to prove his opinion instead of the rule, he states, that because Venison was a good race horse and sire, that shape and substance is not a desideratum; although we are aware, if with this you have bad action, your hopes are frustrated. But Venison was not the "shabby" horse described by him; for his size, a more perfect animal does not exist.

When one of these exceptions prove first-rate for racing, or for any other purpose, it is because their action is superior to what is expected in such forms. And why not expected? Because it does not commonly exist.

It is common with racing men to observe, that they run in all forms: so they may; but the instances of a bad-shaped horse being a superior race horse are few. That they sometimes arrive at a high pitch in mediocrity, I admit; but still, the proportion the number tried of this sort bear to the good-looking, moderate-sized, true-shaped colt, is as fifty to one; leaving out those not thought worth preparing for a trial, it incurring no slight expense to know whether such an one is worth going on with or not. Hence the crowds of such horses in the kingdom, and the chance of one of them being a moderate runner. I have come to the conclusion that the horses of this country (except for the purposes of racing as it now exists) are becoming reduced both in number and quality; and that this is mainly owing to the increased difficulty breeders experience in procuring good stallions for half-bred mares at moderate charges, and to our best-shaped, sound mares, being purchased for the foreign market. The same happens, also, with regard to our country stallions; those best adapted for that purpose being the very horses selected by foreigners. Their government, or the societies for whom they purchase, enabling them to give such prices as empower them to take from this country the sound good-looking animal with fine action; and so forcing breeders not possessing the means or inclination to pay the prices

required for our first-rate sires, to put their mares to any common horse they meet with. And, since most of those that travel, having good appearance and action, are either blind, spavined, curby, or with some defect that makes the foreigner reject them, the result is, that in the next generation the country becomes stocked with mares the majority of which bear some of these defects. For I do not believe there was one-fifth of the unsound horses from these causes twenty years ago. And I contend, contrary to Mr. Goodwin's opinion, that trying to produce a good-looking horse, as understood by a horse-man, is not "to please the eye to impoverish the pocket;" but that the horse of moderate good size, and well shaped, is not only the best race-horse, but the best to get racing or any other stock.

Look at our best stallions of the present day—Touchstone, Don John, The Provost, Sir Hercules, Hetman Platoff, and others of their class. Do *they* tell bad for the opinion herein advocated? Whereas, Venison, Sir Isaac, Colwick, and Picaroon, are about the only getters of race-horses, of the contrary character. Colwick, certainly, got Attila, and Venison Alarm, both superior race-horses. But there have been as good, and a few more of them, got by better-sized horses. And it must be taken into account, that Venison had as many good and tried mares as any horse in the country, and that these were the property of owners who engage the produce deeply; thus giving the chance, in case of a superior horse being got by him, of enormously swelling the number and amount of stakes won.

THE EFFECTS OF CHLOROFORM ON HORSES;

WITH ITS PROBABLE OPERATION AS AN ANÆSTHETIC AGENT
IN VETERINARY SURGERY.

By WILLIAM FIELD, M.R.C.V.S., London.

My dear Mr. Editor,—ASSURED that you, in common with your subscribers, will feel gratified at having some account of the new and powerful anæsthetic agent, chloroform, I send you the results of some experiments I have made with it; and along with them the deductions to which I feel myself, after due consideration, warranted in coming.

First of all, however, let me describe to you the apparatus I make use of. It is simple, consisting merely in an ordinary

leathern (setting) muzzle, into the bottom of which is fitted a tin basin, shallow in depth, provided with a moveable perforated lid, after the manner of an old-fashioned tinder-box. Through each side of it, towards the front, is a circular aperture about an inch and a half in diameter, guarded by a perforated tin plate, by means of which free communication is kept up with the external air; and between these, directly in front, is a third opening in the muzzle, about the same size, differing from the lateral ones only in being provided with a lid instead of a perforated plate, which may be opened and shut at pleasure, according or not as the animal appears to require any additional supply of atmospheric air. The floor of the tin basin is covered with sponge, and upon this is poured the chloroform; from an ounce to three ounces being in general sufficient. The apparatus, such as it is, I have found convenient and effective, and I shall be happy to shew it to any gentleman who may favour me with a call.

In experimenting on some ponies of my own—which I have at times done to gratify some friends of mine—I have found myself able to manage and restrain the animal during the inhalation merely by standing in front of him, and firmly holding his head by a hand upon either rein of the head-stall. In the case of a large or spirited horse, however, a man's power would prove insufficient; and therefore I have had a long rope attached to the head-collar, and passed through a ring in the wall, or some post hard by, and by that means have enabled an assistant to restrain the animal in his vertiginous or delirious movements, and through it to cause him to fall, when he comes to stagger and reel about, *upon his quarters*, instead of suffering him to precipitate himself headlong forwards, which might be followed by very serious consequences.

The muzzle, then, we will say, is buckled fast on the head; and the chloroform is afterwards—not before—poured through the central opening (or over the side of the muzzle), which, as I said before, has no perforated plate, but merely a hinged lid, upon the sponge within the basin. And now the operator either himself seizes the reins of the head-stall, or in case of the rope being used—which is the safer plan—merely watches the movements of the animal, at the same time steadying his head or other part, while his assistant is watchfully and actively engaged with the rope.

The primary effect of the inhalation is evidently one of *excitation*. The animal begins to feel elated; every faculty in him seems aroused: he looks as though he were momentarily going to make a plunge or a dart at you; his breathing becomes quickened; his pulse accelerated; he heaves at the flanks, and perhaps becomes agitated over his whole frame, and may break out into a sweat. By and by, he commences plunging; fights against his opponents,

resists to his utmost his restraint, and finally makes a desperate throe or precipitation, which generally ends in his violently falling upon the ground, and lying as quiet and motionless as though he had been struck dead. And now he may be turned and rolled about, cut or maimed in any way, without manifesting the slightest feeling. A person may run a pin through his ear, or amputate his tail, but he will evince no pain whatever: his nostrils, which were before dilated, now become collapsed; his ears fall down; his breathing is hardly perceptible; his pulse has become slow; his pupils dilated and insensible to light: indeed, there is little external manifestation of vitality remaining, save that one limb is, perhaps, now and then twitched up and flexed, or that there is some appearance of *subsultus tendinum* over parts of the body. In general, in about two minutes after inhalation has commenced, the animal begins to exhibit symptoms of restlessness, and in no case has the time been prolonged beyond fifteen minutes to put the animal completely under the effects of chloroform. In the case of any operation, should it be desirable to maintain the animal under its influence, whenever signs of returning consciousness make their appearance, chloroform must be added in half-ounces or so, from time to time, through the central opening in the muzzle.

However satisfied I may feel about the power of chloroform over the horse as an anæsthetic agent, I cannot think of employing it for the purpose of casting, in lieu of the hobbles. Injuries of the spine accruing in horses under such circumstances, I am of opinion, happen at the moment the animal struggles after being cast. A serious objection to the use of chloroform before casting is, that the fall of the animal is too uncertain to admit of restraint or limitation, and consequently violent injury may result in the struggles and staggerings preparatory to his fall, as well as in the fall itself.

I may conclude this account by the mention of a case of disease in which I have administered chloroform, though with doubtful effect. It was a case of tetanus. The horse at the time was in the slings, being in so hopeless a condition that all prospect of recovery had vanished. Chloroform was suggested. Its inhalation speedily roused the patient, and threw him, for the space of a minute or two, into a state of frantic excitement. Then he fell and became insensible, exhibiting relaxation of his spasmodic limbs, collapse of his nostrils, dilatation of his pupils, &c.; and in this state of relaxation from spasm and total unconsciousness he breathed his last.

CASTRATION UNDER THE INFLUENCE OF CHLOROFORM.

By J. C. PICKERING, V. S., Settrington, Malton, York.

My dear Sir,—I SEND you for insertion in THE VETERINARIAN an account of an operation of castration under the influence of chloroform, in order to increase, in a slight degree, the small number of contributions you receive from the Yorkshire vets. One would think, from the few who send their lucubrations, that York was indeed “wanting,” and that we had so mean an opinion of ourselves, that we were not able to summon sufficient courage to write an article fit to be read by our southern brethren. But let us proceed to the subject of my present communication.

The animal was a six-year old thorough-bred horse, unbroke, by Stumps, dam by Sheik, the property of the Rev. Charles Maitland Long, rector of Settrington, near Malton. I had a tin made in the shape of a common muzzle, to which I fixed a strap to go over the head, similar to a muzzle. On the inside of the tin, round the rim, I had it lined with sponge, in order that it might fit more tightly the horse's cheek. I had the bottom of the tin in the centre pricked full of small holes, to let in air. I placed a large sponge in the bottom of the muzzle, to cover the mouth and nostrils, and poured into it 2 oz., or rather more, of liquid chloroform. As soon as I had placed it on the animal's head—I should have said, however, before this, I had put on the hobbles, ready in case our new move should fail—the groom holding him firmly by the cavesson, scarcely had he had the muzzle on two minutes before he began to shew symptoms of increased vivacity. He commenced staggering from side to side, and reeled about quite ungovernable. Being afraid lest he should fall with his head against the wall, or in some place that would not suit for the operation (as we were in a fold-yard with only a small space fit for an animal to lie down upon, the rest being swampy and wet), I ordered the men in charge of the hobbles to pull him down. He went down as though shot, without a struggle. His legs being made secure, and he being now quite insensible, I commenced the operation. I made an incision through the scrotum and integuments, exposing the testicle. He evinced not the slightest feeling. The clams were placed on without the least retraction of the cremaster. I proceeded with the other testicle with the same effect. The operation being over, his legs set at liberty, and the muzzle taken off, I proceeded to examine his pulse, which I found distinct, though weak. It gradually arose in frequency from 70 to 100, and upwards. I applied a sponge

with ammonia to his nostrils. I found sensibility and consciousness returning. There was an unnatural heat of skin all over the body. From the time of putting on the muzzle to the finishing of the operation was six and a-half minutes, time being kept by Mr. R. Jones, and Mr. T. Hartley, surgeons, Malton, and by Mr. Thomas Cooper, veterinary surgeon, Northallerton, Yorkshire, who kindly consented to be present at the operation, and who can testify to the accuracy of this statement. In twelve minutes from the time of the muzzle being put on he was on his legs again; and though weak, was able to walk to his box, a distance of one hundred yards, and in less than half an hour would have fed as well as ever, had he been allowed. On the following day, after the clams were taken off, he had an hour's exercise; and from that day to the present he has never omitted having two hours' exercise daily (Sundays excepted). He is now breaking in to ride, and is mounted, and in constant work every day. The chloroform used was obtained through Mr. Jefferson, chemist, Malton, from Mr. White, York, and it proved excellently pure.

P.S.—You may form some idea of the effect produced, by an old Yorkshire farmer who was present exclaiming, as the animal lay unconscious after the operation, “He’s dead, he’s dead! I will not give a shilling for him!”

21st January, 1848.

THE USE OF LIME IN OPENED JOINT.

By the same.

Jan. 8th, 1847.—I WAS summoned to attend a grey cart-horse, the property of Mr. David Cook, Settrington, that had two days before received a severe kick on the inside of the near hock; and, notwithstanding, had been worked a whole day at plough. I found the synovia escaping from the wound every time the horse moved his leg. I at once pronounced that it was a case of opened joint, and gave a dose of physic, &c.

From that time till the 4th of February I tried without success every mode of treatment I could think of. Having heard of the peculiar action of quick lime, I procured some, and applied it to the wound, and continued to re-apply it whenever there was an escape of synovia, which happened as frequently as twenty times in the course of the day (more or less). By perseverance, however, it became less frequent. The lime acted (allow me to use the phrase) with railway speed, for on the 7th of February the

discharge had entirely ceased. I then commenced using, and frequently in the course of the day, a weak solution of diacetate of lead, and gave a dose of physic.

After a few days he was blistered, and in due time the blister was repeated. He was then turned out into a fold-yard in the day. By such means he became perfectly sound, and went to plough on the 31st of March. The hock had begun to decrease, and continued so to do until it came to its natural size and form.

Feb. 9th, 1848.

CASES OF DIFFICULT PARTURITION IN A COW AND BITCH, AND OF IMPERFORATE VAGINA IN A HEIFER.

By J. NELSON, V.S., Highfield, Sheffield.

Sir,—I SEND you the following cases for insertion in your Journal, if you can find a place for them.

CASE I.

Difficult Parturition in a Cow, followed by Rupture of the Vagina.

Nov. 29th, 1847, at 2 A.M.—I was awoke by a messenger from Mr. Joseph Smith, farmer, Richmond, who informed me I was to go with him as soon as possible; for he said they had a cow which could not calve, and the calf was not right. I arose, and went with him. When we arrived at the place, I found the cow exhibiting acute labour pains. I inquired how long she had exhibited these symptoms; when, to my astonishment, I was told from the morning before, on which day she had been driven several miles to Sheffield fair. She had shewn symptoms of calving as soon as she arrived at the fair; and in that state was bought, and travelled about four miles to Richmond; and then was not considered to require help till morning. On examination, I found it to be a breech presentation. All was righted in about twenty minutes, without the use of the forceps, though I had got them with me: and the hind legs were brought out, and securely roped. Here, however, I must observe, that, though all appeared to have a favourable aspect as regards the calf, from the length of time the cow had been in labour, which could not have been less than eighteen or twenty hours, much congestion had taken place within

the vagina, so that, when the fœtus was attempted to be extracted, a great deal of puckering of the folds of the vagina preceded the coming of the fœtus, which was frequently obliged to be pushed back, and every means made use of to prevent the folds from gathering, except taking the fœtus away by piecemeal. By the assistance, however, of three men and two boys to the ropes, the calf being already dead, in about fifteen or twenty minutes the fœtus was extracted, though it was evident on the slightest inspection that the vagina was extensively lacerated. I therefore advised the owner to have her slaughtered immediately, to which he consented. On post-mortem examination, the vagina, close to the os uteri, proved ruptured half through its circumference. I have given this case to shew how necessary it is to examine *per vaginam* all animals when parturition does not go on to its conclusion in the course of a few hours. Indeed, I feel no hesitation in saying, that this cow, if she had had help at a proper time, together with her calf, might have been saved.

CASE II.

Difficult Parturition in a Bitch.

One also of Neglect, somewhat similar to the first.

Dec. 29th, 1847.—A bitch, of the small spaniel breed, was brought to my house by Mr. Stephen Terry, in consequence of having, for two days and nights, been exhibiting symptoms of parturition, and during that time having taken no food. She at this time appeared extremely weak. A little stimulant was given, and, on examination, *per vaginam*, the hind extremities of a pup were found to be impacted therein. I informed the owner I was afraid Nature was too far spent to bear up under the operation, and he must not be surprised if the bitch sank during it. However, with my forceps I succeeded in extracting one pup and half of another by piecemeal, the remaining half of which fell back into the extreme end of one of the horns of the uterus, and so foiled my attempts at recovering it, since I could introduce no more than one finger. I therefore advised the owner that we should leave her until morning. She was accordingly made as comfortable as possible for the night, but was found dead in the morning. On *post-mortem* examination, the fore part of a pup was found, as above stated.

CASE III.

Vagina Imperforate in a Heifer.

Dec. 1st, 1847.—A messenger from Mr. Joseph Nicholson, Shiregreen, Sheffield Park Farm, requested me to go and see a heifer, about eighteen months old. I accordingly went to the place. On inquiry, I was informed she had been several weeks unwell.

Present Symptoms.—Constant erection of the tail; setting her back up; straining, and passing small quantities of urine. From these symptoms I was led to believe that there was some affection of the bladder or kidneys; and, as the heifer had been in the straw-yard, exposed to the weather, I ordered her into the cow-house, to be kept warm, and have linseed dust or cake, and a little hay; and to take a laxative, combined with fever medicine.

4th.—I found her much worse in every way. I introduced my arm up the rectum, to ascertain in what state the bladder was, and found it distended with urine. I introduced a human male gum catheter into the bladder, and drew off about two quarts of urine, which appeared of its proper colour. From this I concluded that the disease was not in the bladder or in the kidneys; nevertheless, as yet I had not discovered the true seat of disease. I gave the same medicine, and ordered the like diet until I should see her again.

8th.—All the symptoms much worse; pulse 100, and she lying almost upon her back, straining in the most pitiable manner, with her head and neck out at full stretch, and her forehead flat on the ground, and jaws uppermost. I examined her, *per rectum*, again, and this time discovered the womb to be much enlarged, as far, at least, as I could trace it through the rectum. The nature of the disease now at once struck upon my mind. It was, thought I, a case of imperforate vagina. I immediately withdrew my arm from the rectum, and commenced an examination of the vagina, and I found it to be, about two inches beyond the meatus urinarius, impervious. I informed the owner there was no chance but through an operation, and that he must not be surprised if she died even then, though she would certainly do so without it. He at once put her into my hands to do as appeared best.

9th.—Much the same as on the 8th. I now had her secured, she being already down, and emptied the bladder with the catheter. I then took in my left hand a trocar, such as cattle are tapped with when the rumen has become inflated with gas; the blade about six inches long. Separating the *labia pudendi*, I adjusted the point of

the trocar, to the best of my judgment, about one inch from the rectum, and I maintained it in that situation with my right hand until I had carried my left hand into the rectum. The heifer lay upon her right side, and I stood astride of her hind parts. I now moved the point of the trocar, so as to be able to feel it with the hand within the rectum; then I gently pushed forward the trocar, at the same time directing it by the hand in the rectum, about an inch distant, until its whole length had become introduced. Now I withdrew the blade, leaving the canula in for a few minutes. A starch-like fluid escaped through the aperture. A whale-bone probe was passed in lieu of the canula, and was left in. I then took a probe-pointed bistoury, and passed it gently by the side of the probe, the full length of the blade, and gently drew the bistoury in an horizontal direction, cutting as much of the integument as would allow my finger to be passed by the side of the probe. I now drew out the probe, and introduced a pewter mare-catheter to its full length, which brought away about a pint of fluid similar to the former. By substituting the catheter for a probe, guided by my finger, I cut until the os uteri could be felt, and three fingers together could be passed through the opening made. The quantity of fluid discharged during the operation was about a quart, and with it about half an ounce of blood. The heifer was now released, and allowed to get up. A little of the former medicine was given once a-day, and she was kept warm and made comfortable.

10th.—Doing well: but slight discharge from the vagina; indeed, it has not been seen to stream since I last saw her. To continue her medicine as before.

14th.—Improving; appetite better. Slight discharge; cocks her tail now but little. Discontinue medicine.

20th to Jan. 26th.—Doing well: still discharges slightly. Since this I have not heard of her.

Yours truly, &c.

14th February, 1848.

THE CURE OF GLANDERS IN THE HORSE.

By JAMES BROAD, *M.R.C.V.S.*, 14, *Market-street, Paddington.*

WE have had descriptions of this direful disease handed down to us by numerous writers on the veterinary art from its earliest period, and various have been the opinions respecting its true nature, cause, and curability. It has attracted the zealous atten-

tion of eminent members of the profession of the present day, who have laboured hard to ascertain a more successful plan of treatment to combat such a powerful enemy, and various and diversified have been the experiments to bring about their object. But, in all instances, too often has the disease proved the victor. It is not my intention, at the present time, to attempt a description of its nature and causes but rather to assert that it is not so incurable as many authors inform us, or as numerous practitioners at the present time consider it. It is a well known fact, that some thousands of horses (and many amongst that number valuable ones) are annually consigned to the knacker's knife, or some similar fate, in consequence of being affected with this disease; and I fearlessly state, that a great many of that number might, under proper treatment, have been cured, and thus a great loss saved. I would not be understood to be alluding to the disease in its advanced stage, or where the animal is old; nor yet to those cases where we find the disease the result of a weak and debilitated constitution; for, in such cases, the practitioner would do more to serve the interest of his employer, and likewise his own reputation, by humanely recommending them to be destroyed. I more especially allude, however, to those cases of the acute character, where, the constitution being good and the animal possessing youth, it has frequently occurred, where a veterinary surgeon has been consulted upon a case, and found the usual symptoms by which we recognize the disease, he has at once prematurely recommended its destruction without reference to age or state of the constitution at the time. Previous, however, to its being carried into effect, the opinion of another vet. is sought, who admits the existence of the disease, but, from the age and constitution being favourable, considers the case would yield to treatment. He is probably allowed to treat it, and ultimately success attends his measures; and should the patient happen to be a valuable one, such a circumstance would tell heavily against the reputation of the former practitioner, at the same time that it will add to that of the latter.

That my views may be better understood, and that they may not be thought to arise from theoretical hypothesis, I submit the following cases, whereby the reader will clearly perceive that I do not depend upon success from the introduction of any novel or specific plan of treatment, but upon pursuing a steady tonic course, combined with liberal feeding, regular exercise, pure air, and attention to cleanliness. I am fully aware, it may be urged that, while we are doing this, we are incurring a great risk of spreading the disease; but if a little attention is given to it, the risk will not be great. I would, on all occasions, separate my patient from other animals, and, after

the case is given up, it is necessary that the box or place he stood in should be cleansed with a solution of chloride of lime, after which no danger would be likely to accrue from placing a sound horse in the same situation.

CASE I.

Feb. 25th, 1847.—A brown carriage gelding, six years old, belonging to Mr. W., was brought to this infirmary, having a discharge from the near nostril, which had been in existence, as I was informed, for about a fortnight. There was also enlargement of the submaxillary gland of the same side, and the Schneiderian membrane was ulcerated. No cough present; the pulse firm and natural. The animal fed well, and appeared to possess a good constitution. I considered it a favourable case to undertake the treatment of, and therefore had him removed to a place by himself, where he had no communication with other horses; and I commenced treatment by giving him twice a-day sulph. ferri ʒij, cantharidum gr. viij, with ginger and gentian, and applying to the enlarged glands the ointment of the biniodide of mercury; keeping the nostril cleansed with cold water, ordering him good living, hay, corn, carrots, &c., in fact, any thing he would eat, with occasional warm bran mash. The hay he was made to eat from the ground.

28th.—Feeds well, and appears as lively as a two-year old; discharge from the nostrils increased; the ulcers enlarged; the glands increased in size, but are softer to the feel: this, however, I attribute to the effect of the ointment. I now tried twice a-day an injection of the solution of iron to the nostril.

March 5th.—The discharge still abundant, but not possessing such a gluey character as at the early period of the disease. The ulcers enlarged; the glands quite loose and detached from the jaw. Continue the same treatment, in addition to which, a rod of the nitrate of silver was applied to the ulcers. At this period of the case, my friend, Mr. Dunsford, happened to pay me a friendly call. I directed his attention to the case, and he fully concurred with me as to the nature of the disease, and likewise as to the probability of a favourable result.

10th.—General symptoms improving. Discontinue the injections.

15th.—The discharge much less, the ulcers healing up, and a general improvement apparent. A similar plan of treatment was continued until the early part of April, when he was turned out to grass for six weeks, after which he was brought up shewing no traces of the disease. He was a few days after put to work, and continued to work sound until the early part of February, 1848,

when he was sold for £37..5s. About ten days after commencing treatment of the above case, the same gentleman wished me to examine another of his horses that, he said, was going the same way. This constitutes—

CASE II.

A bay gelding, nine or ten years old, exhibiting every symptom of the disease. The Schneiderian membrane extensively ulcerated, but the discharge was scanty, which probably accounted for its not being observed earlier in this case. The near nostril was the affected one. In endeavouring to ascertain the cause of this disease, I had reason to conclude that this animal became affected by standing near the abovementioned case, prior to my attention being directed towards him; since, after that, I exercised every precaution to arrest the progress of the disease, the owner possessing a great number of horses, and having been in business for many years, and never before having seen the disease among his stud. A similar plan of treatment to that adopted in Case No. I was had recourse to, and was followed by a similar result. After six or seven weeks' run at grass, he resumed his work, at which he is continually performing, as sound as ever. In this case, I should mention, there is a slight mark left upon the cartilage of the nostril (septum narium), the result of ulceration.

CASE III.

A black gelding, five years old, belonging to Mrs. T——. My attention was directed to him on November 9th, 1847, when I found the existence of the disease in a virulent form, the off nostril being in this case the affected one. Upon my reporting the nature of the case to the owner, she thought it advisable to have him destroyed, as she informed me she had had several similarly affected on previous occasions, but always had them destroyed. From the age and constitution being favourable, I advised her to have him placed under treatment; thereupon a convenient place was selected, and a similar mode of treatment adopted to that recommended in the above cases. In the course of a few days the symptoms became aggravated, and farcy shewed itself on the off side of the face to that degree that the eye became nearly closed, and the ala so swollen that it could not be inverted sufficiently to view the membrane. A chain of ulcers shew themselves from the lips across the face. The ointment of the biniodide of mercury was freely applied, and the parts soon after put on a more healthy appearance. At this stage of the disease no medicine was administered by the hand. He took, twice a-day, ʒij of the sulph.

ferri, finely pulverized in his mashes, corn, &c. ; sometimes dissolved in his water. As soon as the swelling of the ala had abated, I discovered the membrane extensively ulcerated. I applied to the ulcers the nitrate of silver, and gave the powders three times a-day. Shortly afterwards I perceived a gradual improvement in my patient. About this time, happening to be in conversation with Mr. Mayhew, I alluded to this case, when he expressed a wish to see it. The following morning he accompanied me to it, and fully agreed in considering it a virulent case of acute glanders. Treatment was continued until Dec. 14th, five weeks from the commencement. Another week was allowed, and he was put to work, and is working at the present day without shewing any disposition to relapse. He was an animal that fed remarkably well throughout the whole of the treatment, and got, indeed, fat. I had an opportunity of seeing him this day, as fat and as well as ever.

CASE IV.

A bay gelding, seven years old, belonging to Mr. H., of Hammersmith. On Sept. 23d, 1847, Mr. Woodger was consulted respecting him, when he found the symptoms present very nearly the same as in Case III. In this instance the off nostril was the diseased one, and likewise farcy had shewn itself on the same side of the face, to a similar degree as in the case abovementioned. I do not think it necessary to detail the treatment or symptoms, as they were so precisely analogous. I had not the same opportunity of watching this case I had the others; but it was constantly attended by Mr. Woodger, and suffice it to say that the treatment differed in no material degree from that in the above cases, and that, on Oct. 26th, he was given up, cured, and has been at work ever since. I could narrate numerous other cases of this disease, followed by the same result. I will not, however, at present, intrude further upon the pages of your valuable Journal, but remain

Yours obediently, &c.

EFFECTS OF CHLOROFORM ON THE HORSE.

By SAMUEL PEECH, *M.R.C.V.S., Wentworth, Rotherham.*

To the Editor of "The Veterinarian."

My dear Sir,—WHEN I was at the meeting of the Council of the Royal College of Veterinary Surgeons, last week, I had some conversation with Mr. Henderson, V.S. to the Queen Dowager,

respecting the administration of chloroform to the horse. Mr. H. made some useful observations to me, and recommended me to Mr. Hooper (7, Pall Mall East) as the proper person from whom to procure the chloroform, and to obtain instructions for its management. I did so; and yesterday two aged mares, in low condition, were brought into a paddock for the purpose.

There was a common hemp halter put on the head, with a good length of cord on each side, and two men to each cord. A leather muzzle with a large sponge in the inside made moderately warm, about $1\frac{1}{2}$ ounce of chloroform poured on the sponge, and immediately put on the head. After administration,

In 2 minutes, irritable, accompanied by a cough.

- | | | |
|---|---|-------------------|
| 3 | — | pulse quick. |
| 5 | — | staggered. |
| 6 | — | began to recover. |
| 7 | — | quite recovered. |

This failed, in consequence of the sponge being too low in the muzzle.

Second Application, immediately, on the same Mare.

In $1\frac{1}{4}$ minute, sensibly affected.

- | | | |
|-----------------|---|--|
| $1\frac{1}{2}$ | — | rapidly do. |
| 2 | — | partly down. |
| 3 | — | effort made to rise again. |
| 4 | — | forced down by two men pushing her over. |
| 6 | — | more chloroform administered. |
| 8 | — | action of the heart scarcely perceptible. Frog setons inserted in all four feet. |
| 9 | — | muzzle removed. |
| 10 | — | the insertion of the last seton in the hind foot gave slight pain. |
| 13 | — | dragged out all the setons without apparent pain; in a state of tremor for two minutes. |
| 15 | — | performed neurotomy on the near fore foot, outside only; slight pain on dividing the nerve. |
| $16\frac{1}{2}$ | — | neurotomy on off foot, inside only; slight pain on the division of the nerve. |
| 20 | — | an incision made on the near hind leg, but sensibility returned before the operation could be completed. |
| 23 | — | sensibility restored. |
| 28 | — | got on her legs, apparently well. |

Second Mare.

- In 1 minute, sensibly affected.
- | | | |
|-----|---|---|
| 1½ | — | down. |
| 2 | — | ceased to struggle. |
| 4 | — | in a complete state of asphyxia; neurotomy performed on the outside of the near leg; no pain. |
| 5½ | — | inside off, leg a little pain. |
| 6 | — | signs of sensation. |
| 10 | — | muzzle taken off; turned over. |
| 12 | — | muzzle put on again; some struggling. |
| 13½ | — | neurotomy, outside off leg; no pain. |
| 15 | — | ditto, inside near leg; no pain; muzzle again removed. |
| 16 | — | action of the heart not perceptible; breathing difficult. |
| 18 | — | action of the heart perceptible. |
| 19 | — | suffered very much, and struggled with all four legs. |
| 20 | — | ceased to struggle. |
| 28 | — | got up, and in a short time apparently well. |

Eight ounces of the chloroform were used for both the mares, and a cloth was tied round the upper part of the muzzle, to prevent any escaping. The time was kept by a gentleman present, and I have no doubt of its correctness.

If you consider this worthy of insertion in your valuable periodical, and will allow it to appear in the next number, I shall be obliged.

I beg to conclude these remarks by saying, that it is, in my opinion, very doubtful whether chloroform will ever become an efficient agent in veterinary practice on the horse, as I believe that these two bad-conditioned animals suffered more in being reduced to a state of insensibility, and in recovering from that state, than they did from the operations performed.

What would be the case with horses in first-rate condition? I do not write this by way of discouragement, it being my intention to take every opportunity of administering it.

Yours, very sincerely.

17th February, 1848.

DEFECTIVE VETERINARY EDUCATION.

By ALEX. HENDERSON, *M.R.C.V.S., Veterinary Surgeon to the Queen Dowager.*

To the Editor of "The Veterinarian."

Sir,—I HAVE to thank you for the insertion of two letters; and as you inserted in your last Number an editorial comment from the "*Mark Lane Express*" on them, to the following effect,—“The importance of veterinary science to the owners of cattle and horses in this kingdom is so great, that if the statements made by Mr. Henderson are correct, means must be taken to remedy the evil. The establishment of a second school or college would, in all probability, have the desired effect,” I take the liberty of again intruding on your space.

The statements I have made are simple matters of fact, and have existed so long, that patience has at last become exhausted. If inquiry were but instituted, so much neglect and want of proper management would be found to exist in our veterinary schools as scarcely could be credited. The consequence of this neglect has been brought home to my feelings as a parent, with one son a veterinary surgeon, and another who will shortly have to commence his studies for the same; and finding that every effort that has been made to induce the proper authorities to remove or amend those evils has not been attended with success, I have addressed myself to you, in hopes that, by making the matter public, others possessing greater influence may take such notice of them as will bring about a change for the better.

I have no wish for the establishment of another school, my object being to draw the attention of the parties who have the control or management of the present Veterinary College towards the existing abuses and neglect.

The Veterinary College of London was established in the year 1791, and the circumstances were briefly as follow:—A society of noblemen and gentlemen, formed for the purpose of the encouragement of agriculture, and from the plan of meeting called the “*Odiham Society*,” somewhere about 1786, determined that a few young men of promise should be sent, at the expense of the society, to study the veterinary art at the French veterinary school that had been established some years before. Just as their arrangements were about to be completed, M. Vial de St. Bel, a young French veterinarian of great promise, came to this country, and endeavoured to lay the foundation for a veterinary college; but

after much negotiation, failed. However, in 1789-90, he returned to this kingdom, and, in consequence of his exertions, aided by the Odiham Society, that institution merged itself into the Veterinary College, thus established in the year 1791, the celebrated John Hunter, Mr. Cline, and other eminent medical and surgical practitioners taking a warm interest in the institution. M. V. de St. Bel was the first professor, and a synopsis for the routine study to be followed in the institution was laid down, and was as follows:—

- | | |
|-------------|---|
| 1st course. | The study of Zootomy. |
| 2d. — | The study of the Exterior of the Horse. |
| 3d. — | Operations. |
| 4th. — | Pharmacy. |
| 5th. — | Botany. |
| 6th. — | Shoeing and Pathology. |
| 7th. — | Attention to the Stables. |
| 8th. — | Epizootic Diseases. |

But scarcely had the young institution began to work when its founder and professor unfortunately died, and a change in its system and management was the result. The course of instruction the first professor had marked out was abandoned, and only the diseases and structure of the horse were taught. Nor was it till the year 1841 that any instruction on cattle, sheep, or swine, was attempted; and this was only brought about by a large annual grant of money from the Royal Agricultural Society; with what success your readers are aware from the report of the proceedings of that body, for which see *THE VETERINARIAN* for June last, volume xx, p. 362.

It does appear a most extraordinary circumstance, that a company of gentlemen professing to be procurators for the public good, and having besides a considerable pecuniary interest in the welfare of the Institution, should suffer the management to go on so blindly. The Veterinary College of England ought to be a model to the world! What has it become? A degraded, neglected, institution! How is it to be expected that persons of good family and education should be at all anxious to enter an institution so managed as not to have a reading-room or even a shelter for the pupils from the inclemency of the weather, save the stables or the gateway. Can we be surprised that many valuable hours are wasted in idleness, or, what is worse still, spent in some adjacent tavern. Even a police-station now-a-days has its library and reading-room, and every institution has more or less regard to the wants and comforts of those who frequent it.

About a twelvemonth ago I took a journey purposely to look through the Agricultural School at Cirencester. Having obtained

a letter of introduction to Mr. Bowling, I was kindly conducted through the building, and was truly delighted at the regularity with which every department appeared to be conducted. The accommodation for the pupils was most complete. Independent of the spacious school-room, I found many of the pupils engaged in study in small apartments. I felt amply rewarded for the trouble and expense of my journey, when I beheld what ample means for the instruction and comfort of the students were provided.

I am quite aware that the accommodation at the St. Pancras School could not be brought into anything like the state of perfection of the one I have alluded to, nor do I think it necessary; still, much might and ought to be done for the better instruction, greater comfort, and encouragement of the students. And I most earnestly hope that the governors of the Veterinary College will see that the best way of supporting their Institution will be by studying a little more the interests of those young men who enter there with the expectation of being sent out as useful and competent persons.

If they would afford that personal inspection so requisite in all institutions, a great change, I feel, would soon ensue; but unless this be done, their College must sink into insignificance; and should it be found necessary to establish another, as has been hinted at, downfall of the old one must be the inevitable consequence.

VETERINARY EDUCATION.

To the Editor of "The Veterinarian."

Sir,—HAVING unintentionally allowed the last month's publication of THE VETERINARIAN to pass without replying to a letter subscribed "An Admirer of Progression in the Veterinary Art," which appeared on the 1st January, in answer to mine of the preceding month, on the subject of education of veterinary students, and conceiving that some parts of the same call for a reply, inasmuch as I appear to have been misunderstood, I ask permission for the few following lines to obtain a place in your Journal.

With the writer of that letter, in most of his observations, I perfectly agree, and therefore feel surprised that he could have so wrongly misinterpreted me as to have supposed that I considered it a disgrace to a man practising the veterinary profession "to put on a leathern apron and examine a foot as to lameness;" on the contrary, I agree with him, and say it is a credit to such a man.

I merely contend, that it is no more necessary for a veterinary surgeon to be skilled in the blacksmith's business than it is for him to be acquainted with that of the saddler's; and as to the instance adduced of Mr. J. Field's *modus operandi*, nothing could be more honourable to a man engaged in the practice of his profession. However, I beg to disagree with him on one point, and that is, when he expresses a doubt "that veterinary surgeons should be connected with the literary world;" and have only to say in reply, that in my humble opinion, I conceive it to be as necessary for them to be liberally educated as it is for the practitioner of human medicine; and I opine that until such be the case, generally, the profession will not be respected as the nature of their calling demands; and that such may be the case is the earnest desire of

A DEVOTED FRIEND TO THE VETERINARY ART.

P.S.—I stated in my last letter, that I did not mean to apply the term *literary* in its full acceptation, as I believe it has too extensive a meaning to be applied to any profession generally.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—Hon.

A MANUAL OF PHARMACY FOR THE STUDENT OF VETERINARY MEDICINE: containing the Substances employed at the Royal Veterinary College, *with an Attempt at their Classification, and the Pharmacopœia of that Institution.* By W. J. T. MORTON, Lecturer on Materia Medica. 4th edit. pp. 382. Longman and Co. London.

As will appear from the above, Mr. Morton's "Manual" has reached its fourth edition; and most deservedly so, since, without it, students of veterinary medicine, in these reformed days of scrutiny into their qualifications, would find themselves a good deal bothered and troubled to search out the useful information it contains elsewhere. So far as our school of instruction goes, veterinary pharmacy may, indeed, be said to have taken its rise in Mr. Morton's Manual. Bartlett published a sort of veterinary pharmacopœia, and so did White; and to these Bracy Clark's "Reformed Pharmacopœia for Horses" succeeded: the two former, however, to professional people, were of no value, and the latter was too restricted for general use. The "Manual" has proved

what the pupils wanted. It initiates them, first, into the properties of matter; secondly, it instructs them in the art and mystery of pharmaceutical operations; thirdly, it teaches them the nature and origin and use of the various substances, natural and artificial, made use of in the practice of veterinary medicine. We can remember the day when "old" Wilkinson was *pharmacien* at the St. Pancras College. We have in our time received some lessons from him in the compounding of purging mass and diuretic mass, and mange ointment and canker ointment; and we have now lying before us a copy—a faithful one, we believe—of that esteemed, well-thumbed, age-honoured collection of "recipes" then in use at the College, which without a *quid pro quo* never passed from the sanctuary of the careful old man into the unhallowed hands of vulgar students. Herein we still find "Eye Powders," composed of five grains of *muriate of soda* and one ditto of *bole armenian*; "Cordial Balls" composed of *powdered ginger* and *linseed meal*, with "*theriac*" sufficient to form a bolus; and "Pectoral Balls," and "Strong Tonic" and "Mild Tonic Balls," all equally choice and rare in their composition, and "infallible" in their efficacy. Induction into these mysteries may be said to have comprised the whole of the veterinary pharmacy of those days. Times, however, are strangely altered now: the veterinary student is required to know that aloes are the inspissated juice of the *aloë spicata*; that hog's lard is a composition of *carbon*, *hydrogen*, and *oxygen*; and that the verdigris used in making canker ointment becomes decomposed by the addition of sulphuric or nitric acid. And herein it is that Mr. Morton's scientific work differs from its empirical predecessors.

So far concerning the veterinary student. As regards the practitioner of veterinary medicine and surgery, the work would be more valuable to him did it extend its reports of the operation and effects and doses of the various medicines in use amongst us, much more than it has, beyond the walls of the College. Insulated as that institution stands, and distant from the metropolis, it never has had, nor can it one while, if ever, enjoy that variety and extent of practice which alone can lead to the testing and estimation of medicines; and therefore Mr. Morton, would he in the practitioners' eyes enhance the value of his "Manual," should as much as possible enlarge his sphere of therapeutic inquiry. Nor need he be content with domestic sources of information; but extend, if he deem it worth his while, his researches into the continental systems of veterinary pharmacy.

Running on in this manner, however, we are forgetting that the "Manual" came under our review some years ago (*Vet.*, vol. x, p. 506, *et sequent*). We must, in huntsman's phrase, "hark back,"

lest we outrun the scent. We said on a former occasion—and we are ready to repeat it on this—that “there was nothing more connected with the wishes and wants, and we feel assured with the improvement, of the veterinary pupil” than Mr. Morton’s “Manual of Veterinary Pharmacy.”

VETERINARY JURISPRUDENCE.

Westminster Hall, 10th February, 1848.

IN THE EXCHEQUER.—MAYHEW *v.* SPOONER.

Tried before Lord Chief Baron Pollock and a Special Jury; five Special Jurymen only appearing, a Tales was prayed.

Counsel for the Plaintiff, Mr. Cockburn, Mr. Martin, Mr. Petersdorff.—Attornies, Messrs. Mayhew, Son, and Reynolds.

Counsel for the Defendant, Mr. Serjeant Wilkins, Mr. H. Hill.—Attorney, Mr. Wilkinson.

[From the Short-hand Writer’s Report.]

Mr. Petersdorf opened the pleadings.

Mr. Cockburn then stated the case on the part of the plaintiff, as follows:—

May it please your Lordship, Gentlemen of the Jury,—The plaintiff, Mr. Mayhew, is a veterinary surgeon, and was for some time a demonstrator of anatomy at the Veterinary College. The defendant, Mr. Spooner, is the principal professor and teacher at that same establishment; and the action is brought by Mr. Mayhew to recover compensation for certain slanderous words applied to him in the presence of a considerable number of persons by the defendant, Mr. Spooner. The history of the transaction, gentlemen, and the circumstances which led to this action, are shortly these:—

In the year 1843 Mr. Mayhew became a student at the Veterinary College, which, as you know, is situate at Camden Town. The Veterinary College, gentlemen, is a species of hospital for horses, if I may use that expression, where horses suffering and labouring under any disease are taken in to be cured, and where, as is the case at our own hospitals for the treatment of human beings, lectures are held, and demonstrations on anatomy

take place, so that pupils may attend for the purpose of preparing themselves to become members of the veterinary profession. Having gone through a course of study there, the object is to pass an examination, by means of which they may become members of the Royal College of Veterinary Surgeons; just the same as young men who intend to qualify themselves for the profession of surgeons, and to obtain admission into the Royal College of Surgeons, are in the habit of frequenting one of the hospitals in the metropolis as students, with a view of learning their profession, and qualifying themselves to pass that examination which is to lead to their introduction to the Royal College of Surgeons as members of that body.

Now, the plaintiff, Mr. Mayhew, became a student at this hospital, called the Veterinary College, in the April of 1843, and he entered that profession somewhat late in life: he was, I believe, turned of thirty at that period; but he applied himself with such extraordinary assiduity, and such determined and devoted zeal to the study of the profession, that before, I believe, much more than a year had elapsed, at all events in the second year of his studies—and I should tell you that students are obliged to continue there two years, I understand, before they are qualified to pass examination—before the end of the second year, before he had passed his examination, such was the proficiency he had obtained, that he was appointed demonstrator of anatomy at this very Veterinary College. He gave very great satisfaction; and notwithstanding that his object was to reform certain abuses in the discipline of the College which he thought had crept in, he became so popular with the students, that I believe no course of lectures or demonstrations that ever took place there were attended or heard by more numerous audiences than those that Mr. Mayhew was enabled to collect. He had stipulated that, after a time, the theatre of the College should be given up to him for the purpose of his demonstrations, which at that time, however, were carried on in the dissecting-room.

It seems that some differences of opinion took place between him and Mr. Spooner as to the extent of the engagements that had been entered into with him for giving up the theatre of the College for his lectures; and it seems, whether from the popularity of his lectures or the number of students that he collected around him, that, at an early period, some jealousy grew up in the mind of Mr. Spooner towards this gentleman. Mr. Spooner refused the use of the theatre, some misunderstanding took place, and it ended in Mr. Mayhew resigning his situation of demonstrator of anatomy at that College, and he withdrew himself from the College. At the same time, being anxious to make himself useful to the students whom he had

been instructing up to that time, though he withdrew from his situation of demonstrator of anatomy, he continued to teach a class of pupils, preparing them for the general purposes of the College. Some obstructions were thrown in his way, not that he was treated very handsomely before. His demonstrations had been at ten o'clock; the appointed class hour being nine. They shifted the hour of demonstration from ten to nine or half-past nine, so as that the two classes might clash, and it ended in his students adhering to him and thronging around him, and somewhat neglecting Mr. Spooner. Of course, some jealousy and heart-burnings arose, as I am afraid, which led to a bad spirit on the part of Mr. Spooner towards this gentleman. So matters stood; he passed his examination with very great satisfaction; he was elected a member of the Council of the Royal College of Veterinary Surgeons, I believe, by the largest number of votes of all those who were admitted in the year he was admitted to the Council, and no one could stand more fair as an honoured and respected member of the profession to which he belonged.

Gentlemen, things were in this position. After he had left the College, and ceased to be connected with it, and become a member of the Council of the Royal College, it so happened that a dispute arose between this College of Surgeons and the veterinary hospital at Camden Town. The profession of veterinary surgeons, as a body, had applied to Government, and obtained from Government, a royal charter of incorporation. It seems the professors and the leading members and authorities of the Veterinary College at Camden Town were not satisfied with the position they had assumed under the charter, and, in consequence, they applied to Government for a new charter, the object and effect of which new charter would have been to place the professors and teachers of that establishment in a position of superiority over the rest of the profession, which, it was felt by the general body of the profession, they ought not to assume; the consequence was a considerable opposition about this charter, the principal promoter of which, I believe, was Mr. Spooner. The Royal College of Veterinary Surgeons presented to Government a memorial against this new proposed charter, and according to the terms of the charter of the Royal College of Veterinary surgeons, a meeting took place of the members of the profession of that college for the purpose of considering this memorial, and considering the charter for which Mr. Spooner and his adherents petitioned. A public meeting took place at the Freemasons' Tavern of all the members of the Royal College of Veterinary Surgeons, and at that meeting attended, as members, Mr. Spooner and various other gentlemen. A discussion took place upon the subject of the memorial which had been presented by the College against Mr. Spooner's proposed charter; it was the subject-matter which

they attended there to discuss; and if that discussion had been conducted temperately, and properly, and decently, no man would have a right to complain of such observations as fairly arose out of the subjects of discussion, that were legitimate; and even if something had been said by one or the other, attacking in the course of the debate, upon public grounds, the opponents of the measure or its friends, nobody could have made the slightest objection.

In the course of the discussion, the Memorial having in some degree addressed itself to the question of the fitness of the parties at the Veterinary College to exercise the rights, powers, and privileges over the profession which they were seeking to assume and arrogate to themselves—I believe the Memorial had pointed out certain objections to the manner in which the business of the Veterinary College was conducted, and to the want of zeal and want of attention that was paid to the discharge of their duties by the professors and the teachers in that establishment—Mr. Spooner attempted to vindicate himself against these charges. Amongst other things, it had been stated, with reference to the most important disease in horses, called the glanders (one of the most fatal diseases with which animal life can be affected), that no lecture had taken place on this important disease, and no attempt had been made to elucidate it, or throw any light on the nature of its treatment. Mr. Spooner, in the most emphatic terms, denied that, and declared that he had lectured upon the subject. A discussion arose upon it, and Mr. Mayhew, the plaintiff, who, having been on the establishment for some time, knew perfectly well what had taken place (as the subject-matter of Mr. Spooner's lectures during the whole period he was there, because it was part of his duty and functions to make the anatomical preparations for Mr. Spooner's lectures), being perfectly satisfied that no such lecture had ever taken place, and no observation had been directed to the subject of this particular disease, he told Mr. Spooner he was under a mistake with regard to that—it was not the case—and Mr. Spooner must be perfectly aware he was stating that which was incorrect. Mr. Spooner again addressed the meeting, and called on them to be aware of what credit they attached to the statements of the man who was addressing them, “for,” says he, “he is a *convicted libeller!* and, what is more, he is a *desecrator and ridiculer of the Christian faith!*” Mr. Mayhew was a little startled at hearing such language spoken of him in the presence of the leading members of the profession, and, in the heat of the moment, he said, “That is a lie!” I do not disguise that, and let my learned friend make the best he can of it: on which, Mr. Spooner again deliberately reiterated the statement he had made, stated that he was a convicted libeller, and a desecrator of the faith of a Christian, and he could prove it. Mr.

Mayhew rose to repudiate, with the indignation which he felt, that which he knew to be an unfounded calumny and untruth. The President interposed; he saw that this might lead to unpleasant circumstances, and said, "Mr. Mayhew, you cannot be allowed to enter into any explanation now: you have your remedy elsewhere; bring your action, and vindicate your character. Do not break up the proceedings and interrupt the harmony of this meeting; have recourse to the remedy which is open to you elsewhere, in a better field than the present." Accordingly, Mr. Mayhew was induced to leave the assembly; but he found these expressions had produced an impression, and a very considerable impression, on the minds of those who heard them, that the imputations on his religious faith, and his veracity and character, in stating him to be a convicted libeller, would induce people to withhold the credit they would otherwise give to his assertions: he has felt his character impeached; and he has therefore felt it is a duty to his honour, and to vindicate his religious faith, to bring Mr. Spooner into a court of justice, calling on him to make good his assertions if he can, and, if not, to afford him that redress which every man is entitled to whose character has been wantonly assailed.

Gentlemen, in the times in which we live, in which there is a growing feeling which every man must uphold, not to have recourse to those old methods to which people were too willing and too eager to have recourse for the purpose of seeking satisfaction in a different mode where the character is assailed, it now becomes the duty of every man to abstain from taking the law into his own hands, and proceeding in a way at variance with morality, religion, and the law of man, to come into a court of justice, and demand reparation in a court of justice as a means of vindicating his character.

Now, gentlemen, if Mr. Spooner had been willing to say that this had fallen from him in the heat of the moment;—if he had felt himself that he had used language which he was not justified or warranted in using, and had been willing to come forward, and say, "I have said that of you which I feel I cannot maintain, which was not justifiable at all in me to use—I am sorry for it, I retract it; and you are at liberty to make known to those in whose presence I uttered it, that I thus give you the means of vindicating yourself from the aspersions I cast upon you, by admitting their untruth, and that I regret the use of them;" this action never would have been brought into a court of justice. Mr. Spooner admits, by the course he has taken in putting no plea of justification on the record, that he used these words of Mr. Mayhew without having any ground whatever for applying them to that gentleman, but he has not the moral courage to make to him that apology and

vindication which, I say, every man who brings the character of another man into question, without having sufficient foundation for what he has said, is bound to do; otherwise, he puts his opponent under the necessity of coming to a court of justice to vindicate his character. That is the position which Mr. Mayhew is placed in; he has no object in coming for vindictive damages; but he has been told, in the presence of fifty or sixty of the most respectable members of his profession, that he is a "convicted libeller and desecrator of the Christian faith;" and he says, these are too serious aspersions affecting the honour or character of any man to be submitted to. I ask you to put yourselves in his situation; how would you like any man in a public assembly to rise up, and say your statements are not to be believed; or that you were a man capable of slanderous another; that you had been convicted of a libel, and were not worthy of credit or belief in another respect, because you were wanting in religious faith, and not a believer in Christianity? Those are too serious aspersions to make on any man. I say it is the bounden duty of a man who makes such aspersions either to withdraw the statement, which he finds and knows to be untrue, or, if he cannot do that, to make that open apology or that open public retraction which such an aspersion unwarrantably and unjustifiably casts on the character of another ought justly to bring with it.

Gentlemen, this is the case. As I said before, Mr. Mayhew does not come for damages, but to vindicate his character: this is the only means open to him, and I trust you will think he has been well founded in the course he has adopted, and that he has a right to come into court to vindicate himself from those aspersions. Mr. Spooner is here, I know, but what course he means to take I cannot tell: I suppose the object will be to reduce these damages to the lowest amount. I ask for no large or vindictive damages; but I do ask you to mark your sense of the conduct of a man who makes these aspersions on the character of another, when, afterwards, he admits he has no means of supporting the charges he has made, and who at the same time has not the courage to avow he has been wrong, and to express his regret.

Gentlemen, I am afraid it was not merely in the heat of the moment that arose from the discussion; I am afraid that the seeds of this animosity were sown long before, and that really there was an unpleasant and bitter feeling in the mind of Mr. Spooner: I should be glad to think it was not so. That there had been a growing jealousy of Mr. Mayhew for some time there is not much room to doubt. At all events this is quite clear, that Mr. Spooner, whether in the heat of the moment, or from some lurking feeling of animosity, I care not which, as he does not choose to put it on the

latter ground, and say he is sorry for it—it is clear that Mr. Spooner has used of Mr. Mayhew expressions and made statements under which no man could patiently and tamely sit down. I trust that you will think that Mr. Mayhew is justified in bringing this action: he asks for no vindictive damages; but I trust you will mark your sense of Mr. Spooner's conduct by giving to Mr. Mayhew what you think will be a full vindication of his character, and for the pain and annoyance which he has been put to.

Mr. Sergeant Wilkins.—It is quite clear, from the opening of my learned friend, Mr. Cockburn, that both these gentlemen have made use, in the heat of discussion, of expressions which I am sure they will regret. They are both men so eminent in their profession, and so much respected, as my learned friend has stated, that, with respect to Mr. Mayhew, it is merely a question of character, and I do not think his character can suffer from it; and, supposing that to be so, I put it to your lordship whether these two gentlemen should not meet each other half way, shake hands, and withdraw a juror. It is quite clear they have both used expressions, according to the opening of Mr. Cockburn, which neither of them can attempt to justify.

Chief Baron Pollock.—No, brother Wilkins, you must put it to Mr. Cockburn; I have no objection, through me, that you should put it to Mr. Cockburn.

Mr. Cockburn.—Then, your lordship, I return the answer. If this had been said some time ago; if Mr. Spooner had said—“What I said was in the heat of the moment, and I regret it, and I allow you to say so to those who heard it,” we should have been perfectly satisfied; but when nothing of that sort is done, and we are compelled to bring our action and come into court, it is a little too much to ask us to withdraw a juror.

Mr. Sergeant Wilkins.—I do not wish to bandy words. If my friend's client had been perfectly free from censure, I should have thought the verdict ought well to be entered for him; but, when Mr. Cockburn states in his opening, that he in the first instance said that “Mr. Spooner was stating that which he knew to be untrue,” and in plain English afterwards said, “It is a lie”——

Mr. Cockburn.—You must take it as I said it—that he told him it was a lie in reference to this, that he was a convicted libeller.

Mr. Sergeant Wilkins.—Before that, in reference to the glanders, that he had stated that which he must know to be untrue.

Mr. Cockburn.—I did not present it in that way; I am ready to put it in any way that is reasonable.

Mr. Sergeant Wilkins.—I think it is a great pity that the usefulness of two such gentlemen should be impaired by widening the breach: it is merely a question of character. As to the character

and respectability of Mr. Mayhew, I cannot suppose it is a question of money—I do not believe it is.

Mr. Cockburn.—Still a man is not bound to pay the costs of a proceeding that is forced upon him.

Chief Baron Pollock.—I do not think I am called upon, brother Wilkins, to express any opinion ; I think it would be very unbecoming in me.

Mr. Sergeant Wilkins.—I will not say another word upon it.

Chief Baron Pollock.—If you made a direct appeal to me, what I would do in your situation, I would answer.

Mr. Cockburn.—All I can say, my lord, is, that I am quite willing, on the part of the plaintiff, to leave the matter in your lordship's hands, and bow to your decision.

Mr. Sergeant Wilkins.—I will do the same.

Chief Baron Pollock.—If I were in your situation, I would certainly tender the costs of coming here : according to my experience at the bar, that is what should be done. It was really necessary to come here.

Mr. Sergeant Wilkins.—Of course, having submitted to your lordship's decision, I am bound by it.

Chief Baron Pollock.—In your situation it is what I should certainly have done : if I had been in your situation, practising at the bar, I should have tendered to the other side the payment of the costs. I do not see how a gentleman could sit down under that imputation without taking some steps ; and I begin to feel very much the force of the remarks made by Mr. Cockburn. I do hope that the absurd and almost insane, as well as wicked, practice of duelling is very fast going out ; and, in order that it may be extinguished, juries should do their duty when they are fairly and properly called upon.

Mr. Sergeant Wilkins.—Will your lordship pardon me for calling your attention to the first observation ? If any thing on the face of the earth, one would suppose, would provoke a gentleman to that barbarous system of vindicating his honour, it would be the being told that he is stating that which he knew to be untrue. If any man told me so, I declare to God I should tremble for the consequences : I do not know what I should do.

Mr. Cockburn.—My friend is putting a tortuous construction upon my words.

Mr. Sergeant Wilkins.—I am not ; I use your very words.

Mr. Cockburn.—My friend is mistaken as to the course I took.

Chief Baron Pollock.—I have given you my opinion, and my opinion is formed on the practice of a great many years at the bar ; and I assure you, in your situation, what I should have done would

have been to tender the expenses, and nominal damages. That which you have said I think is very honourable.

Mr. Wilkinson.—The case has not been opened on our part; it is quite against my consent that such a course as this is adopted. I must request that Mr. Sergeant Wilkins will proceed with the cause: it is quite against the interest of the defendant, and against my own feeling, that this course should be taken; and I do protest against it, and request that this cause be laid before the jury.

Mr. Cockburn.—That gentleman, a single moment ago, agreed to leave it to my lord, and I agreed to it; and they ought to be bound.

Chief Baron Pollock.—I think he ought.

Mr. Wilkinson.—I am quite unprepared for this; it has come on me by surprise.

Mr. Cockburn.—It is taking the chance of your lordship's decision, and then objecting.

Chief Baron Pollock.—This is a strange state of things. I think you had better consider for a short time. I will call on another case, and adjourn this; and, brother Wilkins, speak to your client.

Mr. Wilkinson.—My client is sitting beside me.

Chief Baron Pollock.—It involves questions that we can hardly discuss now.

Mr. Wilkinson.—I should bow with the greatest deference to your lordship's decision, but——

Chief Baron Pollock.—I wish you only to consider.

Mr. Wilkinson.—I have considered.

Chief Baron Pollock.—I do not think you have considered enough. I do not value very much the precipitate determination of a gentleman who refuses to consider any more.

Mr. Wilkinson.—I have considered it for a long time.

Chief Baron Pollock.—You cannot have considered it for a long time, because my brother Wilkins has only made the proposal within the last few minutes.

Mr. Wilkinson.—Something similar has been offered before.

Chief Baron Pollock.—If you persist in having the cause tried, I am willing. I am very anxious to give the parties an opportunity of judging for themselves; it involves more considerations than you are aware of. In the first place, it involves the question of whether you are not bound by what has occurred—a matter which I do not want to try or to settle, if I can help it.

Mr. Wilkinson.—That is not for me to decide, as far as any thing does rest with me——

Chief Baron Pollock.—I will adjourn the case, and take another one, and then these gentlemen can consider it.

Mr. Sergeant Wilkins.—I am afraid I shall have no alternative. I do not know how to act in the case.

Chief Baron Pollock.—Then the cause will go on.

Mr. Cockburn.—At the same time, as a member of the profession, I do enter my protest, most emphatically, against any member of this profession of the bar coming to a distinct arrangement with his opponent, and with the court and jury, in the face of the court and jury, taking the chance of your lordship's judgment, and putting himself in your lordship's hands, as my friend did. His attorney and his client are close under him, and hearing the whole proceeding; they take the chance of your lordship's decision: and I undertake to say, if your lordship had said, we ought to be satisfied with the verdict without the costs, they would have been quite content, and would not have objected to it.

Mr. Sergeant Wilkins.—I feel the force of what Mr. Cockburn says. There is a duty I owe to myself, as far as I am concerned, a duty which I owe to you, my lord, and to the rest of my brethren here; and painful as it may be, and involving some sacrifices as it will to me and others, if the agreement that I suggested and submitted to be not carried out, I must respectfully beg to retire from this cause. I have no other choice. The honour of the bar requires I should do so, and I must do so.

Mr. Cockburn.—I will tell you what I will do. I feel very much for the position that my learned friend is in. I will do one of two things: my friend has acted most honourably, and I feel very much for the position in which he is placed. I have the authority of my clients, persons of respectability, whom everybody knows in this court, to say, they will be satisfied with the costs out of pocket; or, if they refuse that, I will release my learned friend from the engagement he entered into, and let the case go on. I have full instructions from my clients to take the costs out of pocket, or go on and have the cause tried, and release my friend, Mr. Sergeant Wilkins, from the engagement he has entered into, feeling much for the position in which he is placed.

Chief Baron Pollock.—I was desirous, brother Wilkins, that there should be some further consideration, because I saw the position in which you were placed. I felt it, and I knew what you would feel it to be your duty to do, and I knew that the defendant would be placed in a very painful position, being without counsel at all; for no man who instructs a gentleman of honour could hardly expect him to go on with the cause after what had occurred; and I wished that the defendant should have an opportunity of instructing other counsel, or of taking the advice which you pro-

bably would give him, to acquiesce in the arrangement. That was my reason for proposing a postponement. I must say, brother Wilkins, you have acquitted yourself on the present occasion in a manner worthy of the character of the bar. I do not think any gentleman, after he had been heard to make a statement and propose a compromise,—after it had been deliberately left by both parties to the judge, and the judge had decided, I do not see how any gentleman of honour could go on with it. And I do not see how any member of another branch of the profession as honourable as our own,—I do not understand by what singular omission to do his duty he can permit an appeal to be made to the judge, and only withdraw his consent when the decision is adverse to his client.

Mr. Wilkinson.—My lord, after what your lordship has said, I think I am entitled to be heard in vindication of my character.

Chief Baron Pollock.—I think not : the cause is either to go on, or be settled.

Mr. Wilkinson.—My lord, you have thrown out reflections on me: if you do not think I am entitled to answer them——

Chief Baron Pollock.—I do not sit here to try this question.

Mr. Wilkinson.—Then I shall sit down.

Mr. Sergeant Wilkins.—Perhaps I may be allowed to say in vindication of Mr. Wilkinson, that I took it on myself, without consulting him for a moment; and therefore I feel I have in some degree placed Mr. Wilkinson in a position which he ought not to be placed in.

Mr. Wilkinson.—I objected while you were speaking.

Mr. Sergeant Wilkins.—I think the blame is to be attached to me.

Chief Baron Pollock.—Well, brother Wilkins, what shall we do?

Mr. Cockburn.—Whichever you like.

Mr. Sergeant Wilkins.—I understand, we are to go on. My friend, Mr. Cockburn, has released me from the obligation.

Mr. EDMUND GABRIEL called.

[After a short consultation]

Mr. Cockburn.—My friend has adopted the other alternative and offer. The action has never been brought by the respectable attornies who sit before me for costs, but simply for the purpose of vindicating the plaintiff's character: they are satisfied with the costs of pocket; they are willing to accept it; and that the cause shall be settled in that way.

Mr. Martin.—It is understood you withdraw all the expressions you used.

Mr. Sergeant Wilkins.—Yes; and you too.

Mr. Cockburn.—Yes; both sides. Do not let us have a qualified retractation.

Mr. Sergeant Wilkins.—I do not want to do any thing unhand-some or improperly qualified.

Chief Baron Pollock.—What I understand is, that the offensive expressions on your part are entirely withdrawn. What I consider, Mr. Cockburn, the best apology is, the speaking of your client, the plaintiff, as a gentleman of high character, and an expression of regret: I think that is ample.

Mr. Sergeant Wilkins.—And they are both withdrawn.

Chief Baron Pollock.—They withdraw the expressions of the plaintiff. It was, no doubt, an offensive expression; and, next to giving a blow, the use of the expression which is avowed on the part of the plaintiff is as great an offence as can be.

Mr. Cockburn.—It is understood that the words “convicted libeller,” and “desecrator of the Christian religion,” are withdrawn.

Chief Baron Pollock.—Yes.

Mr. Martin.—And then a juror be withdrawn.

Mr. Sergeant Wilkins.—There is no doubt it was a meeting at which there was a good deal of excitement on both sides; and I am certain that Mr. Mayhew would never for a moment justify a gentleman using that language, saying of another gentleman, “you are telling a lie.” They both used expressions which they regret.

Mr. Mayhew.—I am the plaintiff in this case, and this action is brought under circumstances —

Chief Baron Pollock.—Mr. Mayhew, do not. The language addressed to you is withdrawn; nobody ever believes you are a “convicted libeller” and “a desecrator of the Christian faith.”

Mr. Cockburn.—It is a verdict for £5, so as to carry costs.

Mr. Sergeant Wilkins.—40s. will carry costs.

Mr. Cockburn.—Your Lordship will certify it is a fit case for a special jury.

Chief Baron Pollock.—Yes; if you permit me to suggest, I think the better way will be to withdraw a juror and to enter into an arrangement for the purpose of paying the costs.

Mr. Cockburn.—Certainly.

Mr. Martin.—And your Lordship will certify for a special jury, so that that should be part of the costs.

Chief Baron Pollock.—Oh yes.

Extracts from Domestic Journals.

MEDALS TO MEDICAL OFFICERS.

[From "The Lancet."]

AFTER a long opposition, the surviving heroes of the Peninsular war, from Maida to Toulouse, and of the long series of naval engagements which began with Lord Howe's victory in 1794, and ended with the naval fights between the English and Americans in 1814 and 1815, are all to be rewarded by a medal. In this portion of our naval and military history, the medical men of the armies and navies of Great Britain bore their part, and conduced in no mean degree to the brilliant successes it commemorates; yet, according to custom, those of our medical brethren who served in these wars will have no share whatever in the decorations about to be conferred. We feel called upon to protest against this, as being an act of the greatest injustice. In times of peace or war, the avocations of the military and naval surgeons are as arduous, and we venture to say as honourable, as those of their brother officers, while they are attended by peculiar perils of contagion and infection, from which the fighting staff are in great measure exempt. To their peace services it is that the military profession owe the knowledge of the economy and physique of fighting men. Many of the most eminent military writers have been medical men, and some of the greatest names in medicine grace also the military section of our profession. Harvey narrowly escaped being killed by a cannon-ball at the battle of Edgehill; John Hunter served at the siege of Bell-isle; Pringle was with the army in the Low Countries for nearly twenty years; and Sir Gilbert Blane, to whom the prevention of scurvy in our fleets is mainly due, saw a long period of active service. In the day of battle, as we have before had occasion to shew, the personal hazard incurred by the military surgeon is as great as that to which the rest of the troops are exposed, and in all enterprizes of danger the surgeon is called upon to take his chance with the rest. It may be objected that surgeons do not engage in actual fighting; but neither are the officers of an army, from the commander in chief down to ensign, called upon to engage hand to hand with the enemy, except in self defence; and this of course the surgeon would do, if necessary. The duty of the officer is in directing—in wielding and impelling the power of the men under his command to the proper point, with

the proper impetus. All the qualities of intrepidity, courage, and coolness, requisite by the acting officers, are equally necessary to the surgeons of the army and navy. They have frequently upon the open field, or in ships, in danger of fire, sinking, or capture, coolly to follow their vocation; to amputate, trephine, tie up vessels, apply sutures to gaping wounds, extract balls, arrange fractures, and fulfil the other offices of their art, that a great battle may render necessary, and which were recently described most ably, in the House of Commons, by a veteran soldier, Sir Howard Douglas.

To perform these duties well, the very self-same qualities as those which make the brave soldier or sailor are imperatively required; and why, then, are not the same means of evoking and sustaining the military spirit distributed to them in common with the actual fighting men and their leaders? If medals and ribbons are useful in inciting the ardour and rewarding the courage of our troops, they would be equally useful in sustaining and rewarding the same qualities in the medical men of the army and navy. Military surgeons are nothing if they are not imbued with the true military spirit; they are frequently killed or wounded in battle; are called to the front ranks to succour the wounded men; and it is their coolness and skill, exerted on the instant, to which a Wolfe or a Nelson must owe all his chance of recovery. Again, we say, as participators to the full in all warlike dangers, they should be made the sharers of military honours and rewards. Apart, too, from the immediate services of naval and military surgeons, our profession has done enough for the efficiency of the sea and land services to deserve every consideration from civilized governments. Medical science has done much to allay the horrors of war, and lessen the sacrifice of human life; it has done, too, quite as much as military tactics to strengthen the national arms. It is to medicine that our armies owe it, that dysentery and malignant diseases do not stalk after large bodies of troops, as they did of old, causing oftentimes as much dismay in the rear as the enemy in the front, and devastating armies even more rapidly than the sword. It is to medicine that our navy, and not less our commerce and civilization, owe their immunity from scurvy—a pestilence which formerly rendered lengthened voyages or prolonged naval operations almost impossible. How could modern naval warfare be carried on if such a state of things as that described by an unprejudiced historian, Sir J. Herschel, prevailed in the present day?

“The sufferings and destruction produced by this horrid disorder on board our ships, when, as a matter of course, it broke out after a few months’ voyage, seem now almost incredible. Deaths, to the amount of eight or ten a-day, in a moderate ship’s company;

bodies sewed up in hammocks, and washing about the deck for want of strength and spirit on the part of the miserable survivors to cast them overboard; and every form of loathsome and excruciating misery of which the human frame is susceptible; such are the pictures which the narratives of nautical adventure in those days continually offer. At present, the scurvy is almost completely eradicated from the navy—partly, no doubt, from increased and increasing attention to general cleanliness, comfort, and diet, but, mainly, from the constant use of a simple and palatable preventive. If the gratitude of mankind be allowed on all hands to be the just meed of the philosophic physician, to whose discernment in seizing, and perseverance in forcing it on public notice, we owe the great safeguard of infant life, it ought not to be denied to those whose skill and discrimination have thus strengthened the sinews of our most powerful arm, and obliterated one of the darkest features in the most glorious of all professions.”

This description, it is worth observing, applies only to about seventy or eighty years ago.

Thus, then, we have attempted to shew that medical sailors and medical soldiers deserve to form an integral part of the profession of arms, and that they ought to receive their meed of honour and decoration when medals are to be worn and ribbons displayed. They ought not to be treated as mere hirelings, as they now are; and governments may rest assured, that unless the naval and military branches of our profession receive the same stimulus as is awarded to other sections of the army and navy, the state does not receive all the benefits, and call forth all the services, which the profession is capable of rendering. We do not deny the present efficiency of the military medical staff of this country; but taking human nature as it is, in its strength and weakness, there can be no doubt that the prospect of military honors would be a stimulus to the highest exertion—to exertions which mere pay can never compensate. Military and naval medical men deserve that this should be conceded to them for their own services; and they have an additional claim in the great services which the profession of medicine has rendered to the profession of arms. We advise medical officers who served in the actions for which the new medal is to be given to send in their claims to the War Office and the Admiralty; and we should hope such claims would be efficiently supported, at the one, by Sir Jas. Macgrigor, who is as much a soldier as any general, and at the other by Sir Wm. Burnett, who is as much a sailor as any admiral, in the United Service.

THE VETERINARIAN, MARCH 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

A NUMBER of our journal more pregnant with matters of interest and importance to our professional brethren than is the present one, we hardly remember to have put to press; and the matters in it which will command their first, their chiefest attention, are the “Abstract” of the Charter now being petitioned for by the President and Governors of the Royal Veterinary College of London, and the President and Directors of the Highland and Agricultural Society of Scotland, and the “reply” to the same of our own Council. The perusal of the abstract will shew, that all the novelty and gist of the petitioned-for charter is comprised in the introduction of the “Veterinary Board:” strip it of that essential feature, and it is, with all its parade of 55 clauses, but a modification of the charter we are already in the possession of. And the Veterinary Board—as we had occasion in our number of THE VETERINARIAN for December last to explain—is a sort of House of Lords, kindly set over the profession to manage their affairs for them, or, at least, to take especial care that nothing shall be transacted by them having reference to the corporate body, save what has received the assent of their—the Veterinary Board’s—honourable house. We have a notion that this is not *precisely* the sort of charter the colleges desire; still, it wrests a power which they through “usurpation” have for years enjoyed out of the hands of its present holders, members of the profession; and, moreover, it gives them, in part at least, the examination of their own pupils. In the new council, the same as in the old, as on a former occasion we think we pretty satisfactorily demonstrated, the professors are certain to get worsted; though, to be sure, then they will have their appeal to the Veterinary Board, and that board will be constituted in part of themselves, and in the remainder, chiefly, of their patrons.

The "reply" the projected charter has called forth from our council, couched as it is in the form of a "memorial" to the Home Secretary, is a temperate, firm, veracious document. It has met allegations and assertions in the charter as they presented themselves; nor has it needed, in refutation of such as have not been "explained and refuted" over and over again before, any weapons save those of plain fact and simple truth. Every point in the charter has been turned by the reply. It has not left a single plea—no, not even the plea of *expediency*, for granting a veterinary charter in addition to, or as a substitute for, the one already vouchsafed us by our Most Gracious Majesty. And therefore, if perchance it should so turn out that, through some strange official inconsonancy, another charter be conceded, it will be to serve the purposes of the private schools miscalled "colleges." It can have—after what has been stated in the present reply to the proposed charter, and in the former reply of the Council to the "objections" to *our* charter—no pretensions whatever to serving either the cause of the profession of veterinary surgeons or that of veterinary medicine in Britain: both these great ends being already served, so far as, in the present condition of affairs, they can be served, through the approved Royal Charter of Incorporation now in operation amongst us.

NOTICE OF PROFESSIONAL MEETINGS FOR 1848.

The Quarterly Council Meetings are fixed for March 29th, June 28th, October 4th, December 27th.

The General Meeting will take place on the first Monday in May.

* * Members of the profession are admitted to all meetings of Council by sending to the President for the time being, at the time of sitting, their names and addresses. As visitors, however, they can take no part in the discussions.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of February 9, 1848.

Present—the PRESIDENT, the SECRETARY, Messrs. ROBINSON, PEECH, GODWIN (Birmingham), HENDERSON, T. W. MAYER, SILVESTER, CHERRY *sⁿ*., TURNER, FIELD, ERNES, BRABY, ARTHUR CHERRY.

Messrs. Varnell, Draper, Heraud, and Hooper, visitors.

A SPECIAL Meeting, called to consider the motion for Orders in Council, of which notices had been given November 3d, 1847.

It was moved by Mr. *T. W. Mayer*, and seconded by Mr. *Field*, “That, for the purpose of further raising and extending the welfare and dignity of the veterinary profession, it is desirable that certain honorary appointments be created in connection therewith; such appointments to comprise a Patron, twelve Vice-Patrons, and a proportionate number of Honorary Associates; the parties so elected not, however, to be deemed members of the body politic and corporate.”

A discussion ensued which terminated in the motion being carried by a majority of ten to three.

It was moved by Mr. *T. W. Mayer*, and seconded by Mr. *Godwin*, “That a committee, consisting of the President, the Secretary, Messrs. Field, Percivall, and Henderson, be appointed to carry the same into effect.”—Carried.

Mr. *Robinson*, after a few prefatory remarks, moved, “That it appearing to the Council to be desirable that the nature and extent of examinations of candidates should be more specifically defined, the Board of Examiners be requested to prepare an outline of the same for the concurrence of the Council, and for the better information and guidance of the pupil.”

On being seconded by Mr. *T. W. Mayer*, a general but short discussion ensued, when the motion was carried unanimously.

The first meeting having terminated, a Second Special Meeting having been convened by circular for the same evening, the Council resumed its functions.

The *President* read a letter from the Home Office (which we give elsewhere).

The Report of the Committee appointed to prepare a reply was then read, and, being highly approved, it was moved by Mr. *James Turner*, and seconded by Mr. *Field*, “That the Report be adopted, and

that the President write to the Home Office, with a copy of the same."—Carried unanimously.

A Report from the Registration Committee was then read. It was moved by Mr. *James Turner*, and seconded by Mr. *Field*, "That the Report be adopted, and the gentlemen therein recommended as corresponding members, be appointed accordingly."

A discussion, chiefly explanatory, ensued, but terminated in the motion being carried unanimously.

A petition from Mr. *T. B. Darling*, of Australia, student of the Edinburgh school, for permission to appear before the Board of Examiners, certain conditions of the bye-laws, impracticable to be carried out by him having been omitted, was read, and his statements being duly confirmed, acceded to.

Mr. *T. W. Mayer* read a letter from Dr. Knox, on the Education of the Veterinary Student, for which the thanks of the Council were directed to be given.

The Secretary having called the attention of the Council to the fact that a chartered body of farriers exists in the City of London, possessed of certain immunities and privileges, and that such Company is desirous of improving and benefitting their art: it was moved by Mr. *Godwin*, and seconded by Mr. *James Turner*, "That a Committee be appointed to confer with the Farriers' Company, to inquire into the privileges enjoyed by their Charter, and to ascertain whether any steps can be taken for the advantage of both parties;" and "that the Committee consist of the President, the Secretary, and Messrs. Field, Ernes, Percivall, Henderson, and Arthur Cherry."

After some general remarks and explanations, the motion was carried without a dissident.

Copies of Documents referred to in the Report.

Whitehall, 8th February, 1848.

Sir,—I am directed by Secretary Sir George Grey to request, with reference to the petition of the Royal Veterinary College of London and the Highland and Agricultural Society of Scotland, (a copy of which was transmitted to you on the 15th Sept. 1847), that you will inform the Council of the Royal College of Veterinary Surgeons that Sir George Grey is ready to receive any explanation or counter-statement which the Council may be desirous of making with respect to the allegations in the petition, the petitioners having renewed their application for the charter.

I am, Sir, your obedient Servant,

(Signed)

DENIS LE MARCHANT.

Thomas Turner, Esq. President of the Royal College of Veterinary Surgeons, 311, Regent-street.

To this letter the President sent the following answer, accompanied by the reply prepared by the Committee :—

311, Regent-street, 14 Feb. 1848.

Sir,—I have the honour to acknowledge the receipt of your letter of the 8th inst., and enclose the reply prepared by the Council to the leading points of the petition and charter lying at the Home Office; as, however, the application has been renewed, and as there are several points yet unanswered, the Council have the subject still under their serious deliberation, and are preparing a more detailed reply for Sir George Grey's consideration; or, should an explanation to yourself be more convenient, I will do myself the honour of waiting on you at any time you may appoint.

I have the honour to be, Sir,

Your most obedient servant,

(Signed)

THOS. TURNER,
President Roy. Col. Vet. Surgs.

To Sir Denis Le Marchant, Bart, &c.
Home Office.

Report of the Registration Committee.

Since the last report the Committee have received a few additional returns from members of the Royal College of Veterinary Surgeons. That a list comprising the names and residences of 422 members is alphabetically drawn up. It appears to the Committee to be desirable to obtain as much further information on this subject as possible.

The Committee therefore beg to suggest the following :—

That, in accordance with the Minute of Council passed November 3d, 1847, they propose that the following gentlemen be added to the committee as local and corresponding members :—

W. Burley, junior, Leicester; Samuel Baker, Chelmsford, Essex; Robert Boutal, Abergavenny; G. T. Baldwin, Fakenham, Norfolk; G. Carruthers, Lancaster; H. Crowe, Shrewsbury, Salop; Joseph Carlisle, Carlisle; W. A. Cartwright, Whitchurch, Salop; G. Farrow, Ash, Durham; Hordern, Macclesfield, Yorkshire; John Ions, Waterford; W. McKenna, Belfast; R. Pritchard, Wolverhampton, Stafford; H. Christian, Canterbury, Kent; W. Richardson, Peterborough, Lincolnshire; Josiah Rogers, Exeter, Devon; W. Statham, Derby, Derbyshire; W. Stanley, Leamington, Warwick; C. Taylor, Nottingham, Notts; G. Watts, jun., Dublin; O. H. Parry, Reading, Berkshire;

E. C. Dray, Leeds, York; S. H. Withers, Bristol, Gloucester; T. G. Habin, Chichester, Sussex; John Tombs, Stratford-on-Avon, Warwickshire; W. Holliday, Luton, Bedfordshire; W. F. Karkeek, Truro, Cornwall;—Nash, Dorchester, Dorset;—Snow, Salisbury, S. Wilts; Henry Taylor, Sheffield.

That the Corresponding Members be requested to obtain and transmit every information in their power on this subject.

That the Registration List be closed by the 20th day of March next ensuing, in order that the same may be printed ready for distribution at the general meeting.

The Committee are the more earnest in their endeavour to procure as many verified names and addresses of members as possible, as they are aware that there are very many persons who assume to be M.R.C.V.S., who are not entitled to such distinction, to the injury of the really qualified members.

That a certificate of registration, with the College seal attached, be granted to those who have duly registered: such certificate to be obtained upon application to the Secretary or to the district Corresponding Member, upon the payment of a fee of —; the certificate to be as follows:—

*This is to certify that _____ is a duly registered
Member of the Royal College of Veterinary Surgeons.*



_____ } *President.
Members of
Council.*

For the Committee.

ARTHUR CHERRY, *Hon. Sec.*

Sitting of February 23, 1848.

Present—the PRESIDENT, the SECRETARY, Messrs. PERCIVALL, CHERRY, sen., ERNES, J. TURNER, GOODWIN, A. CHERRY, HENDERSON, and MAYHEW.

Mr. Y. R. Graham, visitor.

A Special Meeting called to confirm the Orders in Council passed at the last meeting.

The minutes having been read and confirmed,

The Orders in Council were read over, and, being put to the vote, were each carried and confirmed, and afterwards duly sealed, as required by the charter.

Very little discussion took place.

The *Secretary* read a letter of thanks from Mr. T. B. Darling, accompanied by the requisite certificates.

Mr. J. Turner gave notice "that the Committee of Reply be reappointed, adding thereto Mr. Mayhew."

Mr. A. Cherry stated, that, at the last meeting, not any Scotch practitioner had been recommended as a corresponding member, not from any disrespect towards the members in that portion of the kingdom, but simply from not knowing on whom such selection should fall: he should, therefore, give notice, that the following gentlemen be appointed "Corresponding Members to the Registration Committee:—Messrs. Alex. Grey, senior, Edinburgh; Thos. Turnbull, Hawick; John Steel, Biggar; William Aitkin, Kilmarnock; John Bisset, Montrose; James Tindall, Glasgow; John Fulton, Ayr; and that Mr. James Dawber, of Liverpool, be added to the English division of the list."

Adjourned.

MISCELLANEA.

LIVE STOCK IN THE UNITED KINGDOM.

From "M'Queen's Statistics of the British Empire," we learn the enormous value of the live stock in the kingdom. It appears that there are 2,250,000 horses, of total value of £67,000,000, of which more than £1,500,000 are used in agriculture; and that their value is £45,000,000. The number of black cattle in the kingdom is about 14,000,000 to 15,000,000, of the value of £216,000,000. The number of sheep 50,000,000, whose value is estimated at £67,000,000; and the extent of capital invested in swine is still more extraordinary, when we reflect how little it is thought upon or taken into account. The number of pigs of all ages, breeding and rearing, is calculated to be upwards of 18,000,000, which, taking one-third at £2 each, and the remainder at 10s. each, gives a value of £11,870,000 as the capital invested in pigs alone; making the total amount of capital invested in the above species of agricultural stock, £346,270,000.—*Morning Post*.

M. Le Masson assures us, that he once had a very old fox prepared and dressed *en civet*, for some Parisian sportsmen who were very fond of venison, and that they took it for *chevreuil de compègne*. They must have been persons of exquisite taste and discernment!

HOW TO MANAGE SHY HORSES.

SHOULD you have to pass a camp of gipsies, a carriage, or any other object at which your horse may be expected, or has been taught habitually, to shy; if the object be on the left, pass the right hand on the right rein, about a foot below the left hand, so as to keep his head straight, and to prevent his turning towards the object, and fronting it. This will be sufficient if the horse has always been well ridden. If he has been badly ridden, you must turn his head from the object of his alarm at least sufficiently to see his right eye. And if he has been ill used for being alarmed, you must turn his head still more towards the hedge or ditch on his right-hand side, so as to make him pass the object with his head inclined *from* it, and his croup towards it. Do not imagine there will be any danger of his going into the ditch on that account: the very contrary will be the case. If, instead, you pull his head towards the object of his alarm, and oblige him to face it, he is very likely indeed to run backwards from it; and while his whole attention is fixed before him, he will go backwards over Dover cliff, if it chance to be behind him.—*Hints on Horsemanship.*

GOOD RIDING.

THERE is nothing heroic, nothing grand, in good riding, when dissected. The whole thing is a matter of detail; a collection of trifles. Its principles are so simple in theory, so easy in practice, that they are despised. The pupil on hearing them assents—"Of course!—we need no ghost to tell us that!" But, in fact, the great unpractised secrets in riding are simply these: When you go to the right, pull the right rein stronger than the left: when you go to the left, the left rein stronger than the right. Urge the horse strongest on the side opposite to the guiding rein, and let your bearing on his mouth be smooth and gentle. He who does this, if not a perfect horseman, will at least be a more perfect one than a million out of a million and one.—*Hints on Horsemanship.*

RURAL FARRIERY.

The following is the sign of a village Caleb Quotem on the road between Birmingham and Oldbury:—"William Wright, beast, leash, and farrier, horse and cow, dranches, koinds, and oyles, of various, koinds, and medicines, sold here."



THE
VETERINARIAN.

VOL. XXI,
No. 244.

APRIL 1848.

Third Series,
No. 4.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, M.R.C.S. and V.S.

NEUROTOMY.

[Continued from page 66.]

HAVING determined on the fitness of the subject for neurotomy, and put him through such preparative treatment, or assigned him such resting time by way of preparation, as is deemed requisite, we proceed to take

STEPS FOR THE OPERATION.—But the operation, after all, must be regarded only as secondary in importance, subservient quite to the considerations of fitness of subject, and to the time when, and site (in the limb) where, its performance is to be undertaken. What success may follow the operation is not so much attributable to any anatomical knowledge or dexterity displayed by the operator, as to the judgment he had exercised beforehand in foretelling what the result of neurotomy was likely to be in that particular case.

In all operations, success a good way depends upon circumstances, which are, for the most part, under the control of the medical practitioner. Fitness of subject is the chief of these; preparation of him is another; and last, but not least in animals, comes the securing of the subject, and the placing the part to be operated on in that position in which the operator can best exercise his power and judgment.

Attempts have been made, and are we believe on occasions still made, to perform neurotomy while the horse is standing, using a bistoury in lieu of a scalpel, in a manner we shall hereafter describe. For our own part, however, we advocate casting in all such operations. Let the animal, we say, be cast with hobbles in the usual

manner, and let the limb to be operated on be separated and held in a side-line, until it can be brought to be bound down upon a truss of hay, previously covered with a linen cloth, to serve as a sort of operating table. And, in order to afford still greater security and steadiness of the limb so placed during the operation, an assistant, holding a blunt iron hook passed underneath the toe of the shoe, may firmly stay the foot, and keep the limb extended. While this is being done, however, it requires some vigilance on the part of the operator to see that the limb is not drawn into such a false position by over-extension, that, when the incisions come to be made, and the limb in the interim comes to change position, he finds the cut in the skin not opposite, as he expected, to the parts he is seeking for, but to one side of them; the consequence of which will be, to embarrass him more or less in his future proceedings. Therefore, on having the limb placed in position, let the operator take care that no such deviations by dragging or stretching be made as will throw parts in respect to the skin covering them out of their natural positions. Formerly, the part to be cut into used to be shorn of its hair prior to casting. This however is nowadays, perhaps wisely, dispensed with; the hair not being much in one's way, and the blemish being, for a time, the greater after the wound is healed.

PRIOR TO COMMENCING THE OPERATION, it will perhaps be as well for the operator to run over in his mind the course and relative situation of the parts about to engage his attention. He will remember that

THE METACARPAL NERVES are double, one running down either side of the leg; while the metacarpal artery is single, and accompanies the nerve on the inner side. This renders the relative course of one nerve different somewhat from that of the other.

THE INTERNAL METACARPAL NERVE, descending below the knee, lies buried underneath a fascia spreading from the knee upon the flexor tendons, wherefrom it is stretched across to the cannon bone, ending below in a crescentic border, underneath which, as under an arch-way, nerve, artery, and vein, are all seen emerging in their course down the leg. In the first part of its course the nerve runs close behind the artery, the vein being in front, a relative position which it (the vein) maintains throughout its subsequent course to the foot. About one-third of the length of the cannon downwards, the nerve detaches the *communicating branch*, so called from its uniting with the nerve on the outer side, which it does, after obliquely crawling round the back of the flexor tendons, at about the distance (measured in a straight line) of two inches and a half below its place of origin. After sending off this branch, the trunk more inclines in its passage downwards from the

posterior to the inner side of the artery, and maintains this relation down as low as the fetlock joint. There, as it commences making its curve outward to meet the swell of the fetlock, the nerve gives rise to a branch almost as large as itself, and which takes a similar course, inclining however forward, and running *between* the plantar artery and vein, sending off in its way filaments to the fetlock and pastern, and finally distributing its terminating fibres upon the lateral and fore parts of the coronet. In addition to this *anterior branch*, the metacarpal nerve (or else the plantar nerve) detaches a *posterior branch*; and this takes its course between the plantar artery and plantar nerve, after crossing over the former, as well as over the ligament of the pad; so that, in fact, it is quite superficial. Its destination is the substance of the frog. Neither of these branches (the anterior and posterior) are meddled with in neurotomy. It is

THE PLANTAR NERVE—the continuation of the trunk (or metacarpal) nerve that becomes the subject of neurotomy whenever the *low* operation, as it is called, is contemplated. In the first part of its course, upon the side of the fetlock, this nerve inclines backward to get *behind* the artery; a relation which it does not afterwards alter, though the circumstance of its running over the pastern at the distance of a quarter of an inch behind the artery, while upon the fetlock it runs in contact with it, is one of too much importance to the neurotomist to be treated with indifference; for this circumstance it is that enables the operator with the bistoury or neurotomy knife to insinuate the point of his instrument between the *artery* and *nerve*, and divide the latter without risk of wounding or cutting the former. Another part worthy the neurotomist's attention, and particular attention, is the slender cord known by the name of the *ligament of the pad*; and the reason why it claims such particular attention from him is, that on too many occasions, from its being white and cord-like, and about the size of the nerve, has it been mistaken by the operator for the nerve itself, and divided and excised instead of the nerve. Now, this ligament is a subcutaneous glistening cord, originating in the cushion or *pad* of cellulo-fibrous substance at the back of the fetlock (from which the tuft of long hair is growing); whence it passes in an oblique direction forward and downward, crossing over in its way both plantar artery and nerve, to dip into the interval left between the former and the plantar vein in its front, after which dip it spreads and expends itself upon the substance of the coronet.

THE EXTERNAL METACARPAL NERVE, at the upper part of the cannon, is to be found between the flexor tendons and suspensory ligament; gradually however it inclines outward, and runs along

the posterior and outer border of the flexor tendons, still inclining outward in its course until it reaches the outer edge of the perforans tendon, which for some few inches above the fetlock is the best guide we can take to find it. Upon the side of the fetlock it joins the outer posterior artery, running at first close behind the vessel, and pursuing its course in relation to the artery in precisely the same manner as its fellow on the opposite side, the internal metacarpal nerve, and giving off in its passage similar branches.

THE OPERATION in itself, to a veterinarian acquainted with the anatomy of the parts we have been examining, and whose hand is at all practised in operations of the kind, is any thing but complex or difficult. With the limb properly placed, and the security of it such as will not admit, from struggling, of any material derangement of its position, and with a twitch on the animal's nose, the operator commences by making his

INCISION THROUGH THE SKIN.—Supposing him to be operating for lameness in the foot, which is the case of ordinary occurrence, it is the *plantar nerve* that becomes the subject of operation; and the place for many reasons found most convenient for its division is upon the pastern. The first of these reasons may be stated to be, that, when the seat of lameness is, as it commonly is, the navicular joint, the division of the nerve at this site answers the end required, while it leaves, uncut off, sensation in the *anterior* parts of the foot. The second is, since a horse never *cuts* or bruises his pastern, he will not strike either the wound that is made, or any tubular enlargement upon the end of the divided nerve that may follow the operation. The third, that the nerve is pretty well as accessible here as upon the fetlock; a situation in which the performance of the operation is amenable to one, if not to both, of the objections just mentioned.

The pastern, then, being the part chosen for the operation, the operator, either with his knife or bistoury, proceeds to business. The old-fashioned mode of proceeding is to make an incision with a scalpel directly down upon the nerve; and for my own part I do not think, taking all matters into consideration, that this mode has been improved upon. There certainly is no occasion to make so lengthy an incision as was formerly made; in fact, the smaller the incision the better: at the same time, unless some longitudinal opening be made in the skin, the operator will find himself troubled, first, in getting hold of the nerve when divided; and, secondly, in dragging sufficient length of it out (through such a confined aperture as is made by a bistoury) to excise the requisite portion of it. Prior to making his incision, let him trace with his fingers the border of the united flexor tendons in their course along the

pastern, and at a place immediately below the head of the pastern, where the fingers, pressing inwards, are found to sink into a sort of hollow, let him commence his incision, and carry it boldly downward to the extent requisite—say, an inch or an inch-and-a-half. Let the knife be sharp, and let sufficient force of hand be used in making the incision to divide the skin cleanly and completely through *at once*, so as to lay bare (should the incision have been judiciously made) the *plantar nerve*, crossed obliquely at its lower part by the *ligament of the pad*. When the incision through the skin has been made too low down, or with an obliquity from behind forward, instead of being in a direct line with the border of the tendon, it has happened that this ligament (and no nerve) has presented itself; and the result of this has been, either that the ligament has been mistaken for the nerve, and divided, and excised instead of it; or, that its presence has much embarrassed the operator in finding the nerve. The circumstance, however, of the superficial situation of the ligament, lying so immediately underneath the skin that by uncareful dissectors it is often taken off with the skin, together with that of its *oblique* course, and that of its glistening (tendinous) aspect, confirmed by the proof, that, when pinched or pricked, no sensation is expressed, will at all times clear up any doubt that may exist on this matter. If the ligament happen to obtrude itself in his way, which it will now and then, the operator must push it with his scalpel—better backwards than forwards—out of his way; or he may, if found requisite, even cut it away altogether, without, that I know, any great harm being likely to accrue therefrom. Indeed, honestly speaking, the use of this ligament—for use it undoubtedly has—is wrapped in some obscurity. Having exposed the nerve, a blunt hook or aneurismal needle, carrying a ligature, may be passed underneath it; and now, that we have got with our hook or ligature possession of it, is the time to satisfy ourselves that we have really raised the nerve, and not the ligament, or the plantar artery: for the latter, as well as the former, has been a source of delusion, though I need hardly say that *pulsation* will set the case of the artery at rest; nor is it scarcely necessary for me to add, that the very act of laying hold of the nerve to raise it, and most certainly pinching or irritating it, will set the animal struggling from pain, and thus most satisfactorily clear up every question of identity. All that remains to be done is to divide the nerve; and this is done better with a sharp bistoury than with either knife or scissors. Take care that such division be made as *high up* as the wound in the skin will permit, the object of this being two-fold;—1st, that thereby sensation is at once cut off, which it would not have been had the nerve been, first, divided below; and, secondly, that the excision of the requisite portion of the nerve—say an inch or so—

(which is most conveniently effected by seizing hold of the lower end of it with the forceps) may not occasion the animal the slightest pain or inconvenience. Sutures may be employed or not to close the wound; and this finishes the operation on the inner side. And now it may become a question in the operator's mind whether or not he will proceed further than this, and operate upon the outer side of the leg as well. Cases, well authenticated, stand on record, in which the disease of foot appeared to prevail on the inner side, wherein one operation proved sufficient. At all events, should any such notions be present with the operator, there can be no great harm in making the experiment—suffering the horse to rise out of his shackles, and trotting him, to ascertain what amount of benefit has been conferred by the single operation. Should which not prove satisfactory, the animal can be thrown again, this time upon his opposite side, to undergo the same operation on the outer side of the leg.

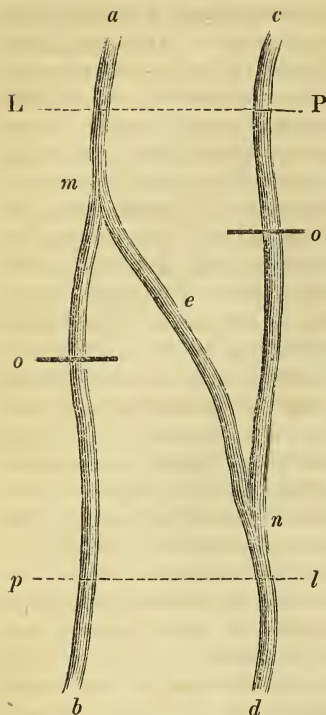
On the other hand, should it be determined from the first to operate upon both sides of the pastern, and which in the majority of cases appears indispensable, as soon as one operation is concluded and the wound sewn up, the animal, as he lies, must be turned over; unless both (fore) legs require neurotomy, and then, before he is turned over, the *outer* side of the other leg may—after the operated leg has been returned to the hobbles, and the one to be operated upon separated and secured—be incised and treated in the manner already directed, there being no essential difference between the inner and outer operations.

The operations concluded, the horse is released, and as soon as he has risen upon his legs it is usual to have him led along, first at a walk, afterwards at a trot, with a view of ascertaining what benefit has been conferred by the operation. The most decisive proof we can have of success is the restoration at once from a state of lameness to one of soundness; at the same time it must be observed, that it does not follow, because such does not turn out to be the case, that hope of restoration is thereby destroyed. A horse may feel himself cramped from having been long fettered, or he may feel sore in moving his fore limbs from his wounds, or he may, I believe, continue to go lame from habit, simply because he has for so long a time prior to the operation been going lame. Let it be ascribed, however, to what cause it may, the fact is well authenticated enough, of horses hardly seeming to experience relief—at all events such decided relief—*immediately* after neurotomy, and yet who in after-times have been restored through it.

Now, then, the horse is returned to his stable. A stall is, in his present condition, a more suitable place than a box for him. He requires to be fastened up securely; two halter ropes are on that account better than one: the object being to keep him from

lying down, and prevent him by any possibility reaching his wounded pasterns with his mouth. And now, wet linen bandages should be rolled round his pasterns; they will serve to support the sutures, and at the same time will keep the parts cool, and so moderate the approaching inflammation. With the same view a dose of physic may be given while he is under confinement. The grand object is to obtain union of the divided skin by the first intention, or by adhesion without suppuration. And to this purpose, nice and continued approximation of the severed edges, with quietude of limb and coolness of body, are the best measures we can take. Should any festering make its appearance in the wounds, which sometimes, despite of our best precautions, will happen, let the bandages be removed, and the sutures drawn out, and the wounds be treated with simple dressings or poultices, as they seem to require.

THE HIGH OPERATION, as it is called in relation to the one we have been describing, which by way of distinction is named the *low* operation, is demanded whenever the seat of lameness for which neurotomy is deemed advisable is above the foot or pastern, in the fetlock perhaps, or above that even. Remembering that the metacarpal nerve of the inner side is closely connected with the metacarpal artery, and that both, along with the accompanying vein, maintain their course along the inner border of the flexor tendons, the latter will prove a sufficient guide to the operator for finding them; and our account of their course, at page 178, will shew him how in point of relation one to another they will be found situate. On the *outer* side of the leg, however, the course of the nerve is different. There, it has no attendant artery, and is to be found, as our former description will point out, rather *behind* than alongside of the flexor tendons; in the space, in fact, between them and the suspensory ligament. Having exposed the nerve by an incision in the direction of its course, the steps of the operation are the same here as in the case below, save and except that due attention must be paid to the presence of the cross branch of nerves forming the communication between the metacarpal nervous trunks. Originating high up, as this branch does on the inner side of the leg, and terminating low down on the outer side, were the two high operations for neurotomy on the same leg performed in directly opposite places, as the low operations are, it is evident nervous communication with the sensorium would remain uncut off, unless such divisions of the trunk nerves were *both* made either above or below the places of junction of the communicating branch. For this reason it is that, in high neurotomy, the operation is commonly performed above the branch on the inner side of the leg; below it on the outer.



The annexed diagram will illustrate my meaning:—Let *a b, c d*, represent the metacarpal nerves dissected out and laid upon the table, connected by their communicating branch, *e*. Supposing the divisions of the two nerves made at any points represented by *o o*, it is evident communication with the sensorium would still be carried on through the communicating branch; whereas, were such points as are represented by *L P* or *p l*, chosen for section, the communicating branch would no longer serve the purpose of concatenation, because the divisions proved either both above or both below the points of communication.

A FEW REMARKS ON PLEURO-PNEUMONIA,

ADDRESSED TO THE AGRICULTURISTS OF GREAT BRITAIN.

By T. W. MAYER, M.R.C.V.S., Newcastle, Staffordshire.

My Lords and Gentlemen,

AFTER so much has been said—after so much has been written, and perhaps remains to be written—on this important subject, it may seem somewhat presumptuous in me, and somewhat inconsistent, that I should venture thus publicly to address you on what by many may be considered a professional subject, but has now become a national calamity.

Although premiums have been offered to a considerable amount for the best essay on this particular subject, I am one of those that believe these means are never calculated to realize the object sought for. It is impossible to make every man his own cattle doctor; it is impossible to convey to minds unacquainted with the

forms of disease, the types, the changes consequent on its progress, the symptoms of its decline, in a popular essay. It is a delusion to suppose that, after a man has produced his well-written paper, detailing with great clearness the modes of infection, the precautions against infection, the premonitory symptoms, and the treatment of the disease, you can take that essay, and, following out the plans therein laid down, be successful in the treatment. You have been led to believe that you can: you have tried different modes of treatment, and they have failed; you may be induced to try them again, and you will meet with the same result, and the disease will continue its ravages as it is doing now, without any exertions being made to arrest its progress. Your confidence in your professional adviser is destroyed; your faith in all remedial agents is gone, and, as a natural consequence, whole herds are swept away out of large and extensive districts in a most lamentable manner. I know of no subject more humiliating for my own profession, or one that conveys a more sweeping reflection on the powers that be, than this. If such a disease had been desolating the country of our horses, would not every effort have been put forth to stop the course of so dreadful a malady?

It is the object of this letter to direct your attention to certain facts which have hitherto been slighted, and to offer some suggestions, which, if acted upon, are calculated to check the progress and mitigate the ravages of the pleuro-pneumonia. They are such as your observation will easily detect, such as no eye but yours can take cognizance of. They are the results of my own experience, and I will endeavour to place them before you as plainly and briefly as possible.

It has for some time been supposed that our atmosphere, at certain periods and in certain seasons, is loaded with poisonous vapour, destructive alike to vegetable and animal life; and it has been proved that at different times, and under certain circumstances, this poison is generated by the decomposition of vegetable and animal substances.

Certain diseases there are which, by proper precautions, may be prevented, and others that may be removed by proper remedies. But as to the cause of pleuro-pneumonia, the human mind, fertile as it is in invention, ready as it is to fix upon this and that as the origin of a disease—which, when once it has obtained its footing within the walls of the chest, defies the utmost skill employed against it—driven from post to post, is obliged to look up to the First Cause of all, and exclaim, in the language of the Patriarch of old, "*Behold the hand of the Lord is upon thy cattle which is in the field.*"

That God was the cause of the murrain which affected the cattle

of the Egyptians, none but an infidel will deny, and that at various times such judgments were inflicted by his almighty power as a punishment for the sins of men, who can doubt? Listen to the question put by the Prophet Jeremiah,—“How long shall the land mourn, and the herbs of every field wither for the wickedness of them that dwell therein? *The beasts are consumed and the birds,* because they said, He shall not see our last end.” The same Almighty Being “that made the earth by his power, and established the world by his wisdom,” still reigns. Of Him it is said, “When he uttereth his voice, there is a multitude of waters in the heavens, and he causeth the vapours to ascend from the ends of the earth; he maketh lightnings, with rain, and bringeth forth the wind out of his treasures.” He works by certain means, and by his power certain effects are produced.

You can often bear testimony to this fact. How often does it not happen that your orchards are nipped in the bud and your crops struck with blight in one night's blast? If, therefore, the wind is charged with something so destructive to vegetable life, is it not fair to suppose that it is at times equally destructive to animal life? Taking this view of the subject, it is my opinion *that pleuro-pneumonia is the effect of the inhalation of a poison conveyed by atmospheric agency.*

If this be true, you may inquire, what is the *first* effect produced? To this inquiry I must beg your most serious consideration; for, however much some may differ as to the cause, those who have observed this disease will agree with me, that the effect produced is always the same. For a long time this was entirely overlooked, and in fact is often still, until too late. Many a cow has been destroyed, supposed to have been only seized with the affection a few hours, when the post-mortem appearances have shewn that this germ of the disease has been in existence for weeks, perhaps for months. *The first symptom of infection is a cough or hoose*, at first slight, but, according to climate and circumstances, rapidly increasing until the disease has advanced to its second stage. Your servant-man comes some morning, and says, “Master, Primrose is not well—she looks starving—she has not given so much milk as usual, and she hooses a bit.” You hasten to your cow-house for the first time, to discover a case of pleuro-pneumonia. Question your man a little closer, and he will tell you, “I have perceived her hoose a bit for some time; they all hoose a little, but you know cows will hoose, sir: but she never failed in her milk before this morning.” Such is, in fact, the first intimation you have received that you have an infected flock. Kill the animal if you like, and you will be persuaded by the disorganization of one lung, sometimes both, spreading from

its centre to the circumference, rendering it unable to perform its natural functions, that the disease is not the product of an hour; yet there has been neglected this premonitory symptom, which should have given you warning, and ought to have reminded you that then was the time to employ curative remedies; and you now only begin to remove a disease which has too often nearly run its course.

It is perfectly true, that all cows cough; but if you could hear, side by side, the cough of a healthy cow with one that has the seeds of infection within her, you would not forget the sound. The one is merely an effort something like a man clearing his voice to get rid of some obstruction—the other an effort to relieve irritation: the first is a free sound—the second suppressed. It does not appear at first painful, but as the disease progresses it becomes harsh and discordant, accompanied sometimes with a low moan.

It not unfrequently happens that this cough will be in existence for months before you will have a single case; in other instances it will appear only for a few weeks or even days. But in this there is nothing unusual: it is well known that the germs of consumption will exist in the human species for years before they come to maturity; and with regard to the absorption of poison, we have still much to learn as to how long it takes thoroughly to affect the system. Take the case of the virus of hydrophobia, which has been known in some cases to be two years in taking effect, and as many weeks or days in others.

Whether the cough symptomatic of pleuro-pneumonia has been in existence for a longer or shorter period, it is certain that it affords you a warning which you must not neglect, for this is the time to adopt curative remedies. Most strongly would I urge upon you frequent inspection of your stock;—listen for the cough, and, when it makes its appearance, at once seek for assistance. Do not neglect precautionary means—fumigate your sheds—strew chloride of lime frequently in your cow-houses—have your stock setoned. Should the cough not abate by the use of the means after mentioned, consult your professional adviser. If your cows are in milk, do not be afraid (if the weather is favourable) of bleeding them; you will find that it will more speedily remove the cough, and will tend rather to increase than diminish your milk.

If you commence and persevere in the use of remedial measures, you will find them generally to remove the cough; and if they do not, the disease will take a much milder form, and yield mostly to that treatment which is now generally adopted by the scientific veterinary surgeon.

It may be thought by some that the treatment of a large stock will entail too much labour; but surely any labour is well bestowed that will check such a disease as this. It is in vain for you to call in professional assistance when the disease has nearly arrived at its termination. Extensive observation has convinced me that it is only curable by the prompt and decided measures had recourse to in its early stages; and I am persuaded, if you will carry out the suggestions to which I have directed your attention, you may in a great measure prevent those extensive disastrous results which have taken and are now taking place in many important districts.

I do not think that, in the commencement of the disease, it is infectious. All the flock that have been exposed in the same atmosphere may have the seeds of the disease deposited within them; but it is only when the system is overcharged with a superabundant quantity of the poison, which then begins to be thrown out by the breath, that it becomes contagious. I should, however, advise that you separate those that cough from those that do not. There is no necessity, unless the weather is very bad, for you to keep your stock up during the time they may be under treatment. I have generally found, when I have had a chance, that the cough has been removed by bleeding and the administration of laxative medicine, such as Epsom salts, either alone or in combination with nitre and digitalis, repeated as occasion requires; but should the disease continue to pursue its course, take the best assistance you can, as, from the varied changes the disease assumes in its progress, each requiring corresponding treatment, none but a veterinary surgeon of experience and practical tact can grapple with it, and he, if only consulted in a later stage, with little or no success.

CASES OF QUITTOR, RUPTURED VEIN, AND PARTURIENT APOPLEXY.

By HENRY DRAPER, *M.R.C.V.S., Chelsed, Leighton Buzzard,
Bedfordshire.*

To the Editor of "The Veterinarian."

Dear Sir,

IF you will find space in your Periodical for insertion of the three cases I herewith send you, I shall feel obliged. I deeply regret that the members of our profession, with some exceptions, do not more frequently report their interesting cases: to do so would be highly beneficial to the junior practitioner, and, if I mistake not, would have a tendency to make veterinary surgery and

medicine progress in the "right way." Assuredly, each of us, particularly we who are in full practice, must occasionally meet with cases which, if not of rare occurrence, are, nevertheless, highly instructive to us individually, and ought therefore to be rendered, as being so to the profession at large. The case of ruptured vein may probably be regarded by some of your readers as a case *per se*, there being no similar case on record that I am aware of; and that is the reason why I relate it. With those, however, who would consider it a novelty I must respectfully beg to differ, being aware of a similar case occurring in Mr. Lepper's practice a short time since; and believing that the cases of "Rupture of the Spur Vein" which we have heard of, were, in reality, precisely the same as the case I am going to report. I think the anatomy and physiology of the parts, long since demonstrated by Mr. Mayhew, fully warrant me in giving this opinion. I shall have great pleasure in transmitting other cases for your next Number*, and shall continue to contribute all cases worthy of interest in future, and trust my brother-practitioners will do the same. In haste,

I remain, dear Sir,
Truly yours.

CASE I.—QUITTOR CURED BY DILATATION.

February 27th, 1847.—I was requested to see an aged brown mare, the property of Mr. Jackson, contractor on the Dunstable railway. The animal, for a considerable time, had been lame in her near fore limb, but the affection had materially increased the last two months, during which time she had been under the care of a shoeing smith. She is now found to be incapable of continuing her work, which has been that of drawing heavy loads along the railway, where she had to step over wooden sleepers rising eight inches above the ground surface. I learned from the driver that she had frequently bruised the coronet of the lame limb against the sleepers, and also with the opposite foot. The lateral cartilages are found to be in a great measure ossified, the inner one forming a large bony tumour. On the coronet, in a line with the middle of the quarter, is a deep ill-conditioned ulcer, the size of a shilling, from which flows a thin, fœtid, and dark-coloured discharge: a probe is readily passed along a sinus extending from the ulcer in a direction downwards and forwards to the extent of three inches. I was informed that the smith had "cored" the sinus and used several kinds of dressings.

Treatment.—The ground surface of the inside quarter was

* The late arrival of this paper forced us to publish our March number without it.—ED. VET.

lowered so as to leave no bearing upon a bar shoe, which was then applied, and removed every third week. The sinus was injected daily with a saturated solution of sulphate of zinc, and rest enjoined.

March 8th.—Have continued injection to this period with no improvement in respect to the lameness, and no alteration of the discharge. A weak solution of chloride of lime was now injected, twice daily.

15th.—The injections have been regularly attended to up to this date, and there is not the smallest improvement. The bichloride of mercury wrapped in paper was now introduced into the sinus, secured by compress and bandage, for twenty-four hours. The sinus was then injected, twice daily, with a weak solution of chloride of lime: on the fourth day the slough was removed, and the injection continued for ten days longer.

30th. The mare is as lame as on my first visit. The discharge is still thin, dark in colour, and foetid, and mixed with blood after exercise. No good resulting from the usual plans of treatment, and my employer evidently becoming impatient, I at once proposed the simple plan of treatment advised by Mr. Mayhew three years ago, viz. converting the sinus into a simple wound by means of the knife: to this he consented, but said it should be the last step taken. Having the crust reduced as thin as possible over the region of the sinus, and well rasped for some distance around the part, a strong probe-pointed bistoury was then introduced, and the sinus completely laid open. A small portion of horn at the inferior extremity of the incision was afterwards removed, to prevent any lodgment of matter, and on doing this was found a considerable quantity of the hydr. nitr. oxyd., which had been used by the smith who originally had been entrusted with the case. Two small pieces of dead cartilage were taken away with the mass here removed. Two other sinuses were now detected, taking a course backwards towards the heel. These were laid open, and a pledget of lint placed in each wound, the foot being enveloped in poultice for two days.

April 2d.—The mare is feeding well, and has done so since the operation—is resting more weight upon the foot than heretofore: the wounds discharge freely, though the pus is still thin and rather foetid. Use chloride of lime with poultice.

4th.—Wounds are granulating well—pus less in quantity, thicker, and not so foetid. Strips of lint wetted with a weak solution of chloride of lime are now inserted into each wound, and retained there by cording and bandage.

6th.—Walks much better, and appears to suffer no pain when standing still or bearing upon the lame foot. The posterior wounds

are nearly filled with granulations: apply nothing to them. The anterior wound and ulcer of coronet are granulating tardily—pus thin. Continue the lint, with weak solution of chloride of lime, to this wound.

10th.—The anterior wound and ulcer progressing slowly: the two posterior wounds are partially covered with a thin layer of horn secreted by lamina.

16th.—The two posterior chasms are well protected with horn, which offers considerable resistance to pressure, save on the coronary surface, where the layer of horn is very thin and yielding: the ulcer of coronet and anterior wound progressing slowly.

20th.—There is no more lameness than what may be attributed to the ossification of the cartilages: the wound and ulcer are much improved since last visit.

24th.—The two posterior chasms of wall are now everywhere filled up to a level with the adjacent horn—the anterior wound is partially covered with horn, secreted by lamina—a space of an inch or more at the coronary surface remains uncovered with horn: ulcer has cicatrized. The proprietor has now determined that the mare shall go to light work, the foot being properly protected.

May 7th.—Has worked regularly without the lameness increasing. The anterior division of wall is pretty much filled up below the coronary surface, but at the coronary surface no horn has been formed.

January 10, 1848.—The mare has continued regularly at work. The two posterior fissures are growing out, leaving an even surface above: the anterior fissure remains in *statu quo*—the coronet at the seat of the ulcer feels hard—a thick layer of cuticle has extended an inch down the fissure. A plain shoe has been worn ever since June last, and no treatment was required after the 24th of April last.

In this case various caustics had been employed, but their action did not prove to be beneficial. The healthy structures appear to have been more affected by them than the disease; and as these agents are not entirely under the control of the practitioner, or exposed to his view, the false quarter which so frequently ensues upon the cure of quittor may, perhaps, in a majority of cases, be attributed to the potency of the remedies made use of. The knife, on the other hand, inflicts an injury which exposes the disease, and by admitting the atmosphere sets up a beneficial degree of inflammation;—the extent and nature of the disorder are laid bare, and the senses are enabled to instruct the judgment. A harder test upon any operation could scarcely have been selected than the present case, which had been in existence for a considerable period before I saw it, and was under my care four weeks before I adopted the

course recommended by Mr. Mayhew, but not generally recognized by the profession. The result was certainly gratifying; but, had the sinuses taken an inward direction, I should have hesitated to employ the knife with the freedom which I used on this occasion. That the sinuses were superficial, I attribute mainly to the altered structure of the cartilage; the bony condition of which, though, as indicated by fœtor, in a state of ulceration, was enabled to resist the progress of the disease. The free incisions, by exposing the bone, set up a new action, and the recovery was as rapid as the disorder had been lingering. There are some practitioners who may object to the plan here recommended to their notice, but a little reflection will assure them it is not attended with danger, or based on principles which have not been long advocated. Many, no doubt, will continue to use caustics; but in that case none ought to be employed which are not highly soluble, as they may otherwise gravitate to the bottom of a sinus, become confined, and act as foreign substances, setting up a degree of irritation which no skill could remove without resorting to an operation.

The mare can now be seen at Mr. Jackson's stable, at Bow, London.

RUPTURE OF THE AXILLARY VEIN.

March 20, 1847.—I was called to a four-year-old mare, the property of Mr. Reeve, of Leighton. The animal had gone through a severe run with the fox hounds four hours previous to my seeing her, which had occasioned extreme congestion of the lungs. But the chief point of interest in this case was a great tumefaction extending from the ulnar and axillary regions along the side of the abdomen, as far back as the fourteenth rib. The swelling was soft and rather elastic. By applying pressure with the two hands at the extremity of the swelling, and carrying them onward to the elbow, the swelling was nearly removed, but upon withdrawing pressure it quickly re-appeared. It was evidently fluid; but whence came it? I could not detect any thing like rupture of the abdominal muscles. The mare had not received any bruise upon the part, and I was therefore inclined to attribute it to hæmorrhage of the spur vein, resulting from inordinate pressure of the girth. My employer being very anxious for the recovery of his favourite animal, I, not seeing a probable chance of that being realized, requested I might have the assistance of Mr. Lepper, of Aylesbury. Suffice it to say, that the animal died, and Mr. Lepper kindly assisted me in making the post-mortem, which I will now briefly relate.

The structure of the lungs was broken up. The pleura intensely inflamed, and there was considerable effusion into the chest. A great quantity of extravasated blood was found immediately beneath the panniculus, and under the accessory thoracic muscles of the side affected. Under the scapula the cellular tissue was completely infiltrated. The axillary vein was lacerated near the second rib, where it is embraced by the expanded tendon of the sub-scapulo-hyoideus muscle. It became a question how such a lesion could have taken place. Not feeling myself capable of satisfactorily accounting for the injury, I requested Mr. Mayhew to favour me with his opinion on the case. Mr. Mayhew writes as follows:—"In extreme exhaustion the muscles no longer obey the will, but their harmony of action is destroyed. To protect the vessels beneath the scapula, the sub-scapulo-hyoideus has been created. Its tendon acts directly upon these delicate parts, and by regulating their position according to the motions of the limb, effectually preserves them from injury. I therefore imagine the exhaustion of the system deprived the guardian muscle of its power, and the vessels consequently becoming compressed, the weakest of them yielded."

PARTURIENT APOPLEXY.

July 15, 1847, 5 o'clock, P. M.—I visited a six-year-old cow, a well-bred Durham, the property of Edward Lawford, Esq., of Louthede, Leighon Buzzard, that had three days previously given birth to a moderate sized calf without unusual suffering, and had appeared to be doing well until the evening of the 15th. That was the third calf she had had since she came into the possession of the present proprietor, and hitherto she had not been ill. She is on grass keep, and is full of flesh. The calf remained with her till the evening of the 14th. On the 15th, the cow-man says she became restless, did not feed well, and had not given near the quantity of milk she ought to have yielded. Symptoms: respiration hurried, stands in a fixed position, and is unwilling to move. Pulse contracted, and numbering 120. Eyes, wild, and starting from the orbits, pupil dilated, iris sluggish, conjunctiva deeply injected; head hot, mouth and nose hot, and rather dry. A scanty purulent discharge from the vagina, with no fœtor. Bowels open, and has urinated more frequently than natural. Has not been observed to ruminate this afternoon. No distention of rumen. Extremities and skin generally hotter than natural. Udder feels full, but is not painful on pressure. The shed being very warm,

and ill adapted for her, I had her removed to an open out-house, close by. Upon loosing the animal and turning her towards the door-way, she ran staggering out into the yard, where she stood fixed again for a minute or two. We then carefully got her into the out-house. No sooner in than she ran her head against the wall, and, falling down, was incapable of rising. Treatment: I drew blood from jugular to a considerable amount, but could not collect it. An evident impression was made upon the pulse, which afterwards was readily compressed. I ordered the head to be kept constantly wet with cold water, the body to be covered with a rug.

Seven o'clock, P. M.—Respiration hurried; pulse hard and rather full, numbering 103; head hot. V. S. till pulse became feeble. Gave aloës Barbad. \mathfrak{z} j, ol. crotonis Mxxx, spt. ammon. co. \mathfrak{z} j, in a draught.

Nine o'clock, P. M.—Pulse 120, soft and round, and readily compressed; pupil less dilated, and contracts on bringing the light near the eye; respiration free, but still much accelerated; no distention of rumen; appears somewhat conscious. Gave two quarts of tepid water, and ordered it to be repeated every fourth hour with aloës \mathfrak{z} ij.

16th, 7 o'clock, A. M.—Much better; has urinated, and the bowels have acted; appears conscious, but has made no effort to get up. Cease giving aloës.

Four o'clock, P. M.—The cow got up in the afternoon and remained up a short time; appeared very weak. Cerebral symptoms have disappeared; there has been free action of bowels; has taken gruel, and a little grass.

17th.—Is up, and feeds well; very little milk can be drawn from udder.

19th.—Continues doing well.

25th.—Is well, and giving a good quantity of milk.

I have been induced to report the above case in order to shew the advantages of bleeding even after the animal has fallen, when some persons protest venesection should not be resorted to. The result in this case would certainly permit a contrary judgment to be maintained.

THE STATE OF AFFAIRS AT THE ROYAL VETERINARY COLLEGE.

By EDWARD MAYHEW, *M.R.C.V.S., Spring Street,
Sussex Gardens.*

To the Editor of "The Veterinarian."

Sir,

SOME months have passed since I addressed you. The motives which induced my silence will not, I am assured, be misinterpreted. It was due to the profession that my voice should not be heard until every imputation cast upon my character had been refuted. While I was accused, my pride told me to ask no man's confidence. Having, however, met and answered the charges advanced against me, I once more presume to appear as a contributor to your pages.

The time is fraught with danger. That danger is not the less because its threatening appears to awaken no alarm. The peril calls for action. All who have feelings to express or opinions to declare should now be heard, lest forbearance be mistaken for apathy, or silence be construed into consent. I too well know the sentiments of our body to believe there are none who feel the circumstances which surround us. The charter once more is assailed. The same parties who have hitherto confused the deliberations of the Council are again in motion. They have been beaten; yet they retain no sense of defeat. They refuse to be convinced; but with a fatuity bordering upon madness, they persevere in a course injurious to their characters and to the interests which in honour they are bound to respect.

A new charter is demanded. On what ground is it applied for? Either the reasons have not been stated, or I want the sense to perceive them. All I can comprehend is the statement, that the teaching at the Veterinary College has been favourable to the advance of veterinary science. The fact must be admitted. Our art has been benefitted by the efforts of the Professors. Nevertheless, that circumstance constitutes no argument on which to ask the revocation of an existing grant, or the foundation of a novel system. The motives which induced that instruction should in candour have been stated. It should have been shewn that the teaching was undertaken solely upon public grounds. Such, however, cannot be demonstrated to be the fact. The Saint Pancras Institution is a private association, in which the animals of individuals are supposed to be "doctored cheap." It was founded for other ends; but such it has become. The school which origi-

nally was its object has grown to be no more than an appendage. The tuition which is afforded is not gratuitous. The accommodation of the pupils is not even of an ordinary kind. The instruction is in many points deficient, and in others it is erroneous. The fees paid by the students enable the governors to retain the services of the Professors without drain upon their funds. The school, therefore, is a source of profit. It is of advantage to the institution, and, being kept up on such ground, I cannot see it gives any right on which to found a request for public grants.

The governors know nothing of the school. During the time I was attached to the institution as a teacher I know not that I ever saw a gentleman holding such an office. Certain am I, no inquiry was ever addressed to me concerning the object of my teaching or the conduct of my class. Unknown to the governors I was appointed, and ignorant of their existence I remained in my situation. They knew nothing of me, or I of them. No orders were transmitted to me as to what I should do, and no report was made of that which I had done. No minutes were kept of the transactions of the school. The College was left to the discretion of the teachers. Beyond that it was free from direction or control.

Certainly, in answer to the above it can be said, gentlemen, members of useful and scientific associations, were invited to inspect the place. Equally certain is it the Professors were nominally responsible to the Governors. A report was annually drawn up and approved. All this is admitted, but unfortunately the admission will establish nothing. A few gentlemen may walk through the building, and see that which the attendant Professors request them to look at. Of course, in return for courtesy they are polite. Thanks and approval are expressed. The visitor is reported to depart delirious with delight. On reflection, however, what can such a person assert that he has learnt? What can he have ascertained about the internal regulation of the place? He sees young men, and these, he is told, are students. He enters a theatre, and he is informed lectures are daily delivered. He walks into a room crowded with specimens, and is acquainted that it is a museum illustrative of anatomy. His ears are amused, and his eyes are pleased. He, however, leaves the Veterinary College as ignorant of all that really concerns the conduct of the place as the man would be of the British government who had merely been shewn through the offices of Downing-street. Nevertheless, opinions uttered after so hasty and superficial a view have been seriously urged as proofs that the school is properly managed, and the institution systematically conducted.

Such evidence is obviously ridiculous. The report annually made is of no greater value. It is the report of the Professors concern-

ing their own doings; of course, being such, it would be pleasant. The governors, as gentlemen, are not disposed to question it. If no rumour necessitating inquiry has reached them, the report is formally passed. Under the circumstances, complaints are not likely to be heard by them. They rarely visit the College. When they meet, it is at the Thatched House—a long distance from Saint Pancras. Then the accounts have to be audited. These last constitute the real business of the assembly. No narrative of the proceedings is published. All is snug, and, as a natural consequence, every thing is agreeable.

Secure from internal direction, the College also is protected from public supervision. No one may be decidedly turned out of the building; but they who come to it merely to look, are never welcomed. A cold reception readily checks any inquisitiveness of disposition. The stay is brief, and the visit rarely is repeated. Other colleges are managed on a different plan. The lectures are reported. The professors seek publicity, and take pride in the discussion of their opinions. The profession are received with kindness. Their presence is regarded as an honour, and their attendance is courted. The reverse is the fact at Saint Pancras. It stands alone amidst the colleges of London. No report of the lectures is given. The veterinary profession are not even permitted to be subscribers. They who best could judge, and are most fit to approve, are arbitrarily excluded. From criticism the Professors are protected. The pupils alone hear the lectures. When one has obtained his diploma, if he enter the walls, he is informed that his presence is obtrusive. Gentlemen who have graduated at the College have been even ordered off the premises. The grooms have been commanded not to speak to them. The Professors feel they are private, and they act in a manner calculated to maintain their privacy. The place is given up to them, and in it they consult only their pleasures. To the public they acknowledge no right, and to the profession they accord no privilege.

The foregoing assertions embody but a portion of the truth. To state every fact, would require more space than I dare venture to occupy. If all were told, the narrative would seem exaggerated. I suppress much. Enough, however, has probably been advanced to convey some idea of the condition of a school, the existence of which is urged upon the Government as a sufficient plea for annulling a charter, and establishing an unconstitutional authority over a profession.

The folly and the impudence of the demand provoke wonder. Nevertheless, I have no wish to assert that the teaching is wholly bad. Under the circumstances, it is better than might be expected. Still it is imperfect. On some points it is deficient; on

others, it is erroneous. During the time I was connected with the institution the lectures did not embrace many important diseases. Glanders was not dwelt upon in the theatre; no lecture on that subject was delivered. I repeat this assertion with confidence. My position gave me every opportunity to ascertain the fact. I was constant in my attendance. I made ample notes. I prepared the table for the Professor. I examined the pupils on what he taught. I had every facility to learn the truth, and more than ordinary reason to remember it. I have consulted my notes, and they confirm my belief. The days and dates are recorded, but nothing concerning glanders is to be found. Still, not depending on my own impressions, I have made inquiry. Other gentlemen were as assiduous as myself. I have asked them to confirm or to correct my assertion. They give but one reply: and against such evidence, can a single individual be produced capable of saying he heard this fatal disorder dwelt upon, while I was either a pupil or a teacher at the College?

In another sphere, rabies was not alluded to. On this matter my evidence is positive. The same reasons which cause me to recollect the one circumstance, occasioned me also to remember the other. Let these two facts be fairly weighed: if they are not thought to be established, it would be only justice to institute inquiry. That inquiry I shall be happy to assist.

In anatomy, as in pathology, the course was wanting. The Professor hurried over this portion of his duty. Of the lymphatic system he made no mention. The ligaments he did not notice. The muscles, arteries, veins, and nerves, he barely touched upon; telling his class to seek in the dissecting-room the information it was his special office to afford. Such was the anatomical instruction concerning the horse. With regard to other animals, the anatomy was unknown, and therefore I need not state it was not taught. Something, however, was said about the bones: of the value of that something perhaps a judgment may be formed, when the skeleton introduced to illustrate the osseous structure of the dog actually had the bones incorrectly articulated, and probably thus retains them to the present hour.

Turning from the teachers to the men, I ask, what are their acquirements, that they would place themselves at the head of the profession? What have they done? What have they discovered? What have they invented? What have they written? To such questions, Mr. Morton may with some credit reply. That gentleman, however, standing as he does alone in merit, is the least influential and the worst remunerated of the Professors. The others must be silent, or their desert has strangely been concealed. Of the value of the general instruction my own case may afford an

illustration. It is by no means pleasant to make confessions of this kind; but, rather than seek the proof at another's expense, I advance the statement. When I started in practice, it was my fortune to have many dogs brought to me for treatment. I strictly followed the College method in the measures I adopted. The animals died. The agents I had been taught to rely upon were either inoperative or injurious. There are many gentlemen can speak to the effect the result produced upon my mind. I actually thought of resigning my profession. At length, in desperation, I cast from me all that I had learned. Consulting books and studying principles, I began upon a new plan entirely. Let the result tell how much of error I discarded. During the last six months, but two of these animals have died under my care. One had chronic ulceration of the duodenum opening into the abdominal cavity, and was under my charge but forty hours. The other died of hydrothorax, after it had been in my custody but an hour and a half; having, for a fortnight previous, shewn symptoms of disease.

The foregoing may read harsh: some even may think the statement has been heightened. Those, however, who are acquainted with the facts, will know that not a tithe of the truth has been alluded to. The corruption of years is not to be contained in a few pages. The system is bad, and, of course, evil has grown up under it. The Professors are not wholly to blame. Perhaps they are to be pitied. They have been placed in false positions: it could be pleaded in their behalf, that they have been surrounded by abuses which existed before they took office. I regret only that gentlemen in such a situation should have been blind to the evil in which they moved.

The governors are not to be reproached. They are gentlemen; and however unfortunate may be their acts, their motives, at all events, are not to be suspected. They mean well, but they are misled. They are mistaken. They are ignorant of the facts. Still I lament that a body so well intentioned, and so honourable, should have been induced to join in a public movement before they had taken some pains to ascertain the circumstances of the case.

The school being paid for all it gives, can advance no higher claims than what every tradesman could adduce. The existence of a paying speculation establishes no right on which to address the state, asking for extraordinary and unprecedented powers. On the score of benefits conferred, nothing can be urged. On the ground of injury inflicted, something on the other side might be insisted on. The school, however, under the charter has improved. That improvement should not be regarded as a wrong. The Professors ought not to feel that progression is an injury. What

complaint, however, can they make? The number of pupils has increased. The income has, therefore, been enlarged. The Professors, however, urge that under the charter they are not allowed to examine their own pupils. Is this a grievance? If it be, then Abernethy, Cooper, and Liston, in silence bore the ill; and what such men endured without regret, surely Mr. Spooner or Mr. Simonds might put up with. The charter places the Professors in the same position which the highest ornaments of the medical body occupy, and I cannot see their pride should be offended.

The Council have behaved with liberality to the teachers. Mr. Sewell and Mr. Spooner are members of that body. Those gentlemen retain their seats; but out of this very circumstance arises considerations of a most distressing nature. What the Council does is virtually and legally the act of each member of that body. All alike are responsible; and none can, by right or honour, shrink from the responsibility. This is evident; a child must recognise so plain a principle. Let it be applied. Mr. Sewell and Mr. Spooner, being members of the Council, petition against the Council, or complain to the Government of their own deeds. Acting under the Charter, they seek to destroy the Charter. In one view they are foolish, in another they are treacherous. They accept appointment to act for, but they hold it to move against. They have two characters which cannot be reconciled. If the Charter be wrong, why do they lend their names to its support? If it be right, why do they oppose it? Their conduct is contradictory. I fear it is open to graver charges. When confidence is accepted from a public body, the trust, in my opinion, should be held sacred to the interest which created it.

In the zeal of their opposition the Professors seem to have lost sight of reason. It is openly asserted the teachers of the London College will establish an examining board and grant diplomas to their pupils. The threat is puerile; no man of character could sit on such a board. No member of the medical profession having any station to uphold could lend his name to the manufacture of quack diplomas. The idea is preposterous. Could it be carried out the diploma would be worthless. In no court of law would it be recognized. Men practising under such authority would rank with farriers. The threat, however, shews the regard the Professors entertain for the welfare of the public or the advancement of veterinary science.

Nevertheless, having expressed such a determination, with what grace can the Professors, or any acting with them, appear as petitioners before the Government. They pray a charter, and yet at the very time they make the prayer they are openly planning to bring the power a charter has created into contempt. They are,

without disguise, opposing the self-same authority they beg to be invested with. Those who ask, at least should shew a disposition to respect. Still, while appealing to the Crown, they are actively thwarting the expressed and proclaimed commands of majesty.

Inquiry is wanted : it must be instituted before matters proceed much farther. In the present state of affairs no ministry could advise the crown to grant the proposed new Charter. There is no evidence to shew it is required ; no proof to shew it is deserved. Without necessity and without merit it cannot be conceded. For the existing Charter there is ample precedent. For the one applied for there cannot be quoted a single example.

Compare the two parties acting in opposition ;—a profession and the professors of a single school. The one a public body, the other a private clique. On one hand the meetings are open and the decisions public ; on the other side the proceedings are secret, and the conduct removed from inspection or responsibility.

The governors, and those acting with the school, will, I am certain, on reflection withdraw from the present disgraceful contest. Desiring only good, they are, on conviction, incapable of remaining the advocates of evil. It is said they are committed to the cause they have espoused. I deny they are so committed ; or, granting that they are, they are gentlemen, and have no petty fear of acknowledging they have been deceived.

The veterinary profession, however, must now shew its feeling. If the Charter have their support, the fact must be demonstrated. In such a cause, every individual must act as if the issue depended on his single arm : all know what has been. They are aware how their wishes are opposed, and their best interests endangered. If the threatened plan of manufacturing illegal diplomas be carried into effect, the consequences will not be slight. The war which quacks and farriers have for so many years maintained will receive new vigour. In the country, the certified of the College will hardly be distinguished from the constituted member of the Charter. The false and true paper will be confounded.

Fearing the possibility of such an event, I have induced a talented young artist to execute a model of the crest of the Royal College of Veterinary Surgeons. He has produced a work which, on the score of art, is deserving of no measured praise. It is, in fact, a noble performance ; one that would not disgrace the gallery of a connoisseur. The centaur rears boldly up, firmly grasping the shield, as if he defied it to be wrested from him, and was determined to retain it. The figure is full of spirit, and displays more talent than I can here afford space to allude to ; my present purpose being to explain the motive rather than to enlarge on the beauty of the production.

This work, I am empowered to say, shall be allowed to pass into the hands of those only who are members of the Royal College of Veterinary Surgeons. From its size and peculiarity of appearance it would constitute a conspicuous and appropriate ornament of the surgery. A diploma may not to every visitor who calls on a member of our profession be intelligible. Certificates may be, and have been, mistaken for instruments of authority. Here, however, is an object which, certain to attract attention, will be seen only where the title is assured. It will form the honourable sign of recognised pretension; and where it is found, there will the most ignorant be enabled to discern the title of the practitioner.

I have long desired that we possessed some mark of the kind. Of the utility of the design there can be no dispute. That it shall be possessed by none but members, I undertake the responsibility. In the first instance, I make myself answerable that it shall be obtained by no one whose right is not beyond dispute. It should afterwards be a point of honour not to sell or give it to any not associated with the corporate body. The profession to whose special service it is devoted must be careful that it is not under any circumstances perverted from its intention.

In conclusion, let me state, I have no further interest in the work, or any control over it, beyond that which I have implied in the above statement. It is to be sold, but at what price I do not know. Being, however, a work of some size, and much merit—circumscribed in its circulation, and therefore limited in its sale—I cannot imagine it will be published cheap. Neither do I desire it should be sold at too low a price, lest, being obtainable at small cost, it should grow to be lowly estimated, or pass into the hands of those who could desire it to sell again.

Those who may wish for particulars I refer to the proprietor, Mr. T. Bailey, 8, Conduit-place, Spring-street, Paddington. From that gentleman every information may be procured, but the cast itself can only be had through my order.

I remain, Sir,

Your obedient servant.

MAY NOT CHLOROFORM PROVE USEFUL IN THE SLAUGHTER-HOUSE?

By A RETIRED MEDICAL OFFICER.

AMONG its many uses, may not all the horrors of the slaughter-house be superseded by its intervention?

Having several times witnessed the effects of chloroform on

small animals, chiefly the speedy and apparently easy transition from life to death in those animals, when confined in an atmosphere of chloroform, the idea immediately arose to my mind, whether similar effects might not be produced on larger animals by the same powerful agency? On further reflection, I am induced to submit the question, not only to the practical class immediately concerned, but to the scientific inventors and introducers of the various importances which have lately conferred wealth, power, and pre-eminence particularly upon this country. May not all the cruelty now inflicted upon animals doomed to destruction for our use—may not all the violent, offensive operations in the slaughter-house be rendered unnecessary and superseded—may not the inflictors and the sufferers both be relieved by the simple introduction of chloroform?

Unlike many recent discoveries; unlike quinine, morphia, and the other alkaloids, obtained with difficulty, and from expensive materials, chloroform, obtained by a simple process and from materials not costly, is now prepared largely and cheaply in London. A confined space—a cellar for example—could easily be filled with an atmosphere of chloroform; a score of sheep could be turned into the cellar, the door closed upon them; after a little excitement they would fall into unconsciousness, insensibility, and death; all in a short space of time, of about half-an-hour. A second and a third score could be similarly served in the same atmosphere, or with a little additional chloroform.

So with the larger animals: they might require, perhaps, a little more care, as liable to more excitement at first. Chloroform, transparent, clear, has an extraordinary sweetness, a peculiar ethereal flavour—is heavier than water, and sinks in it, though powerful—is very manageable, and of easy evaporation.

On inquiring of a practical man whether he thought the meat might be affected by this mode of killing, he thought not; but if affected at all, he thought it would be beneficially. Animals are fond of sugar and sweetness: their meat would be more likely to be improved than injured by the sweetness and peculiar flavor of the chloroform. Hams are improved by previous sugar, and by penetrating juniper.

As in all other researches, trials, practice, experience, are here necessary, and can alone answer the questions or give the information required. No science, however extensive, can tell beforehand what will happen in any chemical operation.

. In the above philanthropic suggestions we trace, if we mistake not, “the writing on the wall” of an old comrade, and a truly estimable friend.—ED. VER.

RUPTURE OF THE URETHRA OF AN OX,

CONSEQUENT UPON INJURY, FOLLOWED BY IMMENSE EXTRA-
SATION OF URINE INTO THE CELLULAR TISSUE UNDER THE
ABDOMEN, WITH EXTENSIVE SLOUGHING OF SKIN AND PRE-
PUCE.

By ROBERT READ, *M.R.C.V.S., Crediton, Devon.*

December 7, 1847.—I WAS requested to look at an ox, the property of Thomas Hole, Esq., Gutton Barton, Shobrook, which had a large circumscribed swelling under the belly, mostly confined around the prepuce, but extending backward. I examined the swelling, and pronounced it to be an effusion of urine under the skin, arising from some cause that had lacerated the urethra. Mr. Hole could hardly credit such was the case, as there was no visible wound or injury externally, and as in urinating it flowed through the prepuce. I still maintained my conviction that such was the fact, although a portion came through the natural channel. On driving the ox out of his stall he began to urinate, but the stream was small, and soon ceased. On looking at the animal behind, the detrusores urinæ were still acting, and propelling the urine into the cellular tissue. By the following morning I expected there would be a total stoppage through the natural orifice. Such was the case. On visiting him the next day, the swelling was most extensive, and might be not inaptly compared to a common market pannier in size. Knowing it would be fruitless to attempt passing any instrument beyond the receipt of injury, I at once introduced the trocar its full length, as near as I could guess, posterior to the receipt of injury. On pulling out the stilette the urine rushed out with considerable force, followed by an intolerable stench, resembling putrid urine. The owner was now satisfied, and convinced that my diagnosis was correct. When the part was at its utmost distention the ox failed a little in his appetite, and slight fever came on. On seeing him the following morning after the introduction of the trocar, the swelling was considerably reduced, and the urine still running through the canula. I apprised Mr. Hole that in all probability extensive sloughing of the skin would take place, and a false outlet or urinary fistula would be the termination, provided gangrene did not kill the animal.

On the 12th, ecchymosis of the skin was plainly indicated: four or five days after it began to separate, and the urine rushed out through several openings. The artificial opening now allowed the urine to escape; the canula was withdrawn. During the

sloughing the stench was so great, that it became necessary to sprinkle powdered charcoal over the surface, which corrected it. In about five weeks from the date of injury nearly the whole of the skin of the belly, with the prepuce, fell off: it rapidly granulated, and the animal perfectly recovered, with the exception of an artificial urethral orifice. In tracing out the cause of the injury, it was acknowledged by the plough-boy that the ox had several times on the day previous been gored by his companion, by drawing his horn across his belly, in turning the corner of the field in his work. This is the third case of torn urethra I have seen. The others were produced in jumping hurdles or wood fences: not being able to clear the fence, the animals got across, and remained for hours before seen, and thus lacerated their urethra.

During the convalescence of the ox the animal evinced but little pain, ate heartily, lay down, and ruminated, more especially after an outlet was made for the urine. He is now thriving fast, and bids fair to make sixty score weight.

LETTERS ON THE SUBJECT OF PLEURO-PNEUMONIA IN CATTLE.

*By H. DRAPER, M.R.C.V.S., Chelsea, Leighton Buzzard, Beds.
To the Editor of "The Veterinarian."*

LETTER I.

Dear Sir,—IF you will let this short letter appear in your forthcoming Number of THE VETERINARIAN, I shall feel obliged, being desirous of ascertaining the opinions of my brother practitioners generally, as to the *real cause* of the "pleuro-pneumonia" in cattle. I regret we have not seen more papers on this disease from gentlemen who are in the habit of almost daily witnessing the disease in its varied form, and who, doubtless, have accumulated much valuable information on this very important subject. I will enter more fully into this matter ere long, and for the present content myself by very briefly stating the opinion I have formed respecting the *cause* of the malady, with the view of submitting my opinion to the test of the profession generally. I am of opinion that the disease termed pleuro-pneumonia is the result of *suppressed* scarlatina, or vesicular disease; the history of cases, and post-mortem examinations, particularly in the very early stage of the disease, each go to shew such is the case. Trusting this may be the means of eliciting the opinions for which I am anxiously waiting, believe me to remain, dear Sir,

Truly your's.

LETTER II.

Dear Sir,—I wrote my letter of yesterday in great haste, my time being fully occupied just now in attendance upon patients, and making a general dissection of two calves affected with pleuro-pneumonia, resulting from suppressed or very imperfectly developed scarlatina.

I said that pleuro-pneumonia was the result of suppressed scarlatina. Now, I could wish to say that it may also be the result of an imperfectly developed attack of scarlatina. It may also appear as a sequel to scarlatina; for we know in that disease there is a predisposition to inflammation of the serous membranes, the pleura in particular. Wet and cold being applied ere the skin and other organs have recovered their tone, may give rise to pleuro-pneumonia. General dissections will throw much light upon this hitherto mystified disease. Up to this time the examinations have been pretty much confined to the thoracic cavity: such examinations need to be general, that is, the various viscera, the integument, the glands around the throat, the mouth and fauces, all these ought to be looked into, for each in turn will exhibit the previous existence of scarlatina. Such I find to be the case in two young calves now under dissection. Calves will be found to afford a ready means of exploring this disease, and the younger they are the better. If the scarlatina has been suppressed or driven in with them, they are attacked with severe diarrhoea about the fourth day, and it generally proves fatal at the expiration of eight or ten days, sometimes more early. I find this disease prevalent just now with calves, and from the diarrhoea attending it farmers have regarded it simply as a bad form of "scour." The disease proving fatal in such a short space of time with calves, will enable us, I doubt not, to arrive at a satisfactory conclusion, both as to the real cause and nature of the disease. In these animals we can recognise the very early lesions of different tissues, and have not occasion to feel much puzzled as to the tissues primarily affected.

I remain, dear Sir,

Truly your's,

HENRY DRAPER.

Thursday Morning.

* * * Mr. Draper will find most opportune to his desires Mr. Walton Mayer's "Few Remarks" on the subject, one so vitally interesting to us all.—ED. VET.

THE VETERINARY BOARDS OF EXAMINATION.

To the Editor of "The Veterinarian."

Sir,—AT last has the bubble burst, and vapour and froth would be in the ascendant. The "new charter"—the work of "all the talents"—is so far from being attained by its concoctors, that they have no means of getting out of the scrape into which their recklessness has thrown them, but by setting up an examining board of their own, under the old system and management: in other words, that they may manufacture veterinary surgeons in their own way, hide their own ignorance and incapability as teachers, and inundate the kingdom with incompetent persons, to the injury of every party, the profession, and the public.

For months the cry has been, "*we* are certain to have a charter of our own;" but, alas for the vain-glorious! the vaunt has come to naught, or why is there to be established a board, whose acts will be null and void, whose existence has arisen at the dictation of some half-dozen or so, whose power is self-assumed, and supported by egotism and bombast.

But a word on these boards of examination. Of whom are they to be composed? Can any man be found so lost to all honourable feeling as to occupy the position of being a sanctioner of quackery, of delusion? No man who has a particle of character to lose can do so. What kind of instruction is to be meted out, and what is to be the standard of knowledge to enable a candidate to appear before such a board, and possess himself of such a valueless document? It cannot be high, when—if Rumour does not lie—one who is incapable of writing his own name may probably be a candidate; for regulations can only be made equal to the capacities of the smallest. What is or can be the position of such parties who are so unfortunate as to be deluded into an appearance before them?

The answer is simple enough. They will rank only as farriers, cowleeches, or any other class of a similar character; the document for which they are foolish enough to pay will not confer respectability, nor give any position or rank whatsoever; nor will they ever take any other rank than with the *quacks*, and which, to their cost, they will regret as long as they live.

I am well aware that the hope has been held out, that the certificate of these to-be-formed boards of examiners will be equivalent in value to that of the chartered board, both as regards the body corporate, as well as the appointments of veterinary surgeons in the army; but a greater delusion was never attempted,

and is a course that cannot be too severely censured : it is an insult to common sense even to suppose it, and to attempt such a course in the very face of Her Majesty's Government is a proceeding so very extraordinary that one can hardly believe that men who can so act are allowed to be at liberty.

Few know better than I do the real position which army appointments bear to the chartered body. It is true that it has been declared by the Principal Veterinary Surgeon, that the charter did not apply to the army ; and that a plough-boy might be appointed if he, the Principal Veterinary Surgeon, so willed it. Let it be tried, however, and see how long an officer of the Crown can set at defiance any of the acts of Government. Here is no subterfuge, no paltering with a fact ; but a simple matter, that does not require comment. The officer so acting would hardly be able to retain his own appointment, much less be able to save another.

Previous to the granting of the charter, it was necessary to have received a diploma from one of the then schools before obtaining an appointment ; and I believe that I am correct in stating, that no instance to the contrary is on record. Now, if this was the case when the schools were merely recognized in manner hardly public, and arising through private influence, how unlikely, when the Government who have advised Her Majesty to grant a charter of incorporation to the veterinary profession for the very purpose of increasing its usefulness, and thereby made it a legal and responsible body, that now the Government would sanction the appointment of any person who had not gone through the ordeal which the incorporated body had laid down. It is so preposterous that further comment is unnecessary.

But, by the appointment of a board to examine their own pupils, a question arises of rather serious import,—Whether by such acts they do not place their schools beyond the pale of the charter ? They are now by a legal document declared to be institutions for *education*, and not of examination : this power was taken from them by the especial direction of the Crown.

This being the state of affairs, who will be so deficient in personal respect as to appear before a board, and expect that any certificate they can give will be of the slightest value ? Should any such exist, let them rest assured that they have taken a false step, and one which can never be retraced.

Placed as I am, in charge of the "*Registry*," it is my duty to watch over the result of examinations ; and I here distinctly state, that I will not allow any party who may attempt by this false document to foist themselves on the public as members of the corporate body to do so without the fullest exposure. Already, have several persons who styled themselves "veterinary surgeons,"

altered their signs to that of "farrier," or some equivalent term. Let there be no mistake on this point. Exposure is no light punishment, and rigorously shall it be performed. There is a great difference between those who set themselves up in opposition to the law after such law has come into operation, and those who were in existence before such law was known.

I have not taken the trouble to make these statements in any way to interfere with the acts of the schools: they are beneath notice, from their excessive absurdity; but there may be some who might be led astray by erroneous representations into a false position: I have, therefore, felt myself called on to give such a warning as they cannot possibly mistake, and have done so from feelings of kindness to those who might err from ignorance. I may be called upon to act with vigour hereafter; and as I must do so, I think that I am bound, ere it be too late, to warn those whom it may concern of the course which will be adopted. There are always constitutional ways of procedure to make known pretenders to a position to which they are not entitled.

But, trusting that occasion may not arise for any farther notice of so unpleasant an affair,

I am, Sir,

Your's, obediently,

ARTHUR CHERRY.

March 21st, 1848.

COMPLAINT OF A VETERINARY PUPIL RESPECTING HIS ADMISSION FOR EXAMINATION.

To the Editor of "The Veterinarian."

Sir,

PERMIT me, through the medium of your much-valued Publication, to lay the following facts before the Council of the corporate body. I entered the Veterinary College as a pupil in October 1846 (the commencement of last session), with a distinct understanding from the Professors at that Institution that I would be enabled to an examination for a diploma by attending for two sessional courses at the College; at the same time I was informed, that a recent regulation had been made by the Council, to the effect that all pupils, who had not served three years' apprenticeship-

ship with a veterinary surgeon, should attend the College for four sessions; but that, in the event of such regulation being carried into effect, there would be a Board of Examiners formed by the College, who would examine all pupils who had attended for *two* sessions at the College, and grant diplomas to all those they might consider qualified, and that such diplomas would in every respect render its possessor a "qualified" veterinary surgeon; in fact, would be just the same as those heretofore given. Now I, in common with many others, have since learned that such diplomas are worthless, and that, in order to obtain a proper diploma, it will be necessary to attend the College for double the time I was informed on entering: this I consider as most unjust on the part of those who must have been well aware they could not perform that which they were promising. I would here take the liberty to remark, that, whilst students of human medicine can go up for examination at the end of *three* years*, it appears very strange that the veterinary student must remain *four* years at his studies before he is similarly qualified. If the Council were to settle on *three* years instead of *four* for non-apprentices, I have no doubt but that it would be productive of satisfaction to all parties, and to none more than,

Sir, your most obedient servant,

A NON-APPRENTICE.

P.S. The students that entered the College *this* year are similarly situated as those of *last*.

Royal Veterinary College, London,
March 20, 1848.

* This is an error. Candidates for examination at the Royal College of Surgeons must have been engaged "not less than *four* years" in the acquirement of professional knowledge.—ED. VET.

Extracts from Foreign Journals.

WE have received the French journals up to the end of the year. *The Recueil de Médecine Vétérinaire Pratique* contains the Report of the Second Annual Meeting of the *Central Society of Veterinary Medicine*; the society having held its first meeting in December 1846, of which, as no account was given in THE VETERINARIAN at the time, we shall, on the present occasion, include a notice in our summary with that of the report for 1847. At these annual meetings took place the distribution of prizes and medals for questions submitted to the *Concours* in 1845 and 1846.

These two meetings have been held in the *Hotel de Ville*, at Paris; M. Girard, the honorary president on both occasions, occupying the chair. At the first, in 1846, his address was summarily as follows:—

Feeling highly flattered and honoured at the distinguished post the society had, on account of his standing in the profession, elevated him to, M. Girard had to congratulate the society, young as it was, on the success which had attended their early appeal to the profession. Papers had flowed in upon them from all quarters, shewing the happy results of their first *concours*, promising well for the future, and proving that *the funds placed by government at their disposal* had been commendably employed.

RE-UNION it was that constituted their main force. Old members, who had long quitted the veterinary schools, and were now spread over the country, some in towns, some in villages, others in the different cavalry regiments, were left without any relationship or scientific intercourse being kept up between them. It was the professional journals which first furnished the means of establishing an intercourse so much to be desired; and M. Girard had the satisfaction of having been instrumental in setting agoing one of the first veterinary periodicals—*Le Recueil de Médecine Vétérinaire*; and he was happy to have it in his power to add, that this journal had become prosperous, and most widely circulated.

The establishment of veterinary journals has been followed by the successive formation of veterinary societies in many of the provinces; though in the department of the Seine (that in which Paris stands) it is only lately such societies have sprung up. Soon after its establishment, however, the society of the Seine felt sensible that, from its position, it was called on to become *a centre* to its associates at a distance from the capital, to which they might refer their scientific and practical deductions; seeing that, although at Paris matters of practice might not be so prolific as in the provinces, yet that experimental and bibliographical researches

were, for the most part, more readily prosecuted, and that the diseases of the feet, and shoeing, could there be studied to better advantage.

In another point of view, the centre of action residing in the metropolitan society must forcibly operate in putting down charlatans, who mix themselves up with our profession. Let us hope that ere long government will legislate regarding the practice of our art. Enactments so much to be desired can alone put down empirics, and will therefore no doubt have to encounter serious difficulties; these, however, a judicious concours of veterinary societies will go far to surmount.

M. Girard concluded his address on this interesting occasion in the words following:—

“Permit me, gentlemen, before I sit down, to thank the society for the honour they have done me in electing me their honorary president. It is a distinction I am keenly sensible of. Old practitioner, old professor, long time director of a veterinary school whose reputation is become European, I have devoted all my energy to the study of veterinary medicine; and I feel but too happy to be still able to assist my successors in their labours, and to co-operate with them to the utmost extent of my remaining faculties.”

The Central Society of Veterinary Medicine held its second meeting in the *Salle d'Agriculture of the Hotel de Ville*, presided over by M. Girard.

A great number of eminent men, *medical* as well as veterinary, were present on the occasion.

The Royal Academy of Medicine were represented at the meeting by its two secretaries, M. Dubois (of Amiens), perpetual secretary, and M. Mélier, annual secretary.

M. Gayot, director of studs, and corresponding member of the society, took his seat at the committee table.

At half-past one o'clock M. Girard, honorary president, opened the meeting with the following oration:—

Gentlemen,—Yielding to the wishes of the Central Society of Veterinary Medicine, I am come for the second time to preside at its annual meeting. Notwithstanding my fondness for retirement, I have been unable to resist this honourable mission; one that I feel unspeakable pleasure in fulfilling, surrounded as I find myself by distinguished colleagues, almost all of whom have been my own pupils.

The *compte-rendu* which the secretary-general will have to render you of the labours of the central society during the year

just closed, will make it unnecessary for me to enter into any detail relating thereto. I shall confine myself to calling your attention, gentlemen, to the act of kindness of *M. le Ministre d'Agriculture et Commerce*, protector of the Central Society, through whom questions of veterinary medicine connected with agriculture have been submitted to the *concours*, and that, this year, as in 1846, our brethren have replied to the appeal made to them, by addressing numerous interesting memoirs to the Central Society. The report about to be read to you will put you in a position to appreciate the *mérit* of these papers, as well as the studious care the Society has taken to thoroughly examine them.

These are not the only testimonies of esteem and confidence the Central Society has received from veterinarians. A great number, French and foreign, have solicited and obtained the title of corresponding members, and, thanks to this present *concours*, henceforth the Society may expand its scientific irradiations not merely into divers parts of France, but even for the most part throughout Europe.

After nearly sixty years of my life devoted to the study and advancement of veterinary medicine, I find myself looking upon its onward progress with, gentlemen, a feeling of pride which you will well understand, and no doubt pardon me for entertaining. To my eyes they are but the presages of renewed success, leading me to hope that the Central Society, so worthy of its name, will become the rallying focus for every veterinary association that may spring up in France, and that it will ever hold the foremost rank among them, and so realize the hopes expressed at its institution by the minister who founded it.

From time immemorial, academies and faculties of medicine have perpetuated the memory of Hippocrates, by awarding to their *laureates* medals bearing his effigy. In imitation of the same, the Royal and Central Society of Agriculture has by similar means immortalized the father of agriculture, OLIVIER (of *Serre*). The Central Society of Veterinary Medicine, gentlemen, has thought that such good examples ought to be followed, and therefore has, in its turn, caused to be struck a medal bearing the effigy of the founder of veterinary schools, the immortal BOURGELAT, and this medal will be for authors of papers to which prizes have been awarded.

Bourgelat, gentlemen, as you are well aware, not only founded our schools, but was the originator of *La Médecine Vétérinaire raisonnée*. By this double claim, and by many others that might be mentioned, is he entitled to the homage the Central Society has paid him.

These medals, given as the reward of merit, will be received by

every veterinarian with emotion, and will carefully be preserved as a testimonial of his love of the science, and handed down as a heir-loom to his children, who in their turn will one day come to seek in their own name fresh palms of the Central Society, whose business it will be to keep alive the sacred fire (of emulation).

Bourgelat died in 1779. His attached pupils lost no time in dedicating to his memory a plain monument, now the precious treasure of the Alfort School. But will the veterinarians throughout Europe rest satisfied with this hasty tribute of veneration? Will they not rather, one day, do more worthy honour to the founder of our schools, and cause a statue to be erected to his memory?

Gentlemen, let us exclaim, Glory to Bourgelat!—honour to his genius!—honour to the sage observer, to the distinguished writer, who, by his works, emancipated a science which we are left to protect and to promulgate!

* * * We hope in our Number for next month to be able to give abstracts from the reports of the two meetings.—ED. VET.

ENUMERATION OF WORKS RELATING TO VETERINARY MEDICINE PUBLISHED UP TO THE YEAR 1838.

By M. LEBLANC.

VETERINARIANS in general are, perhaps, not sufficiently acquainted with the literary riches of the art they profess, especially when that art comes to be considered in the light it has a right to be,—of a complex science, made up of divers branches of studies professed at the present day with more or less fulfilment in the veterinary schools of France; studies which at once embrace veterinary medicine properly so called, and rural economy in general.

Some notions of this may be obtained by casting our eyes over the catalogue of the late M. J. B. Huzard, arranged by M. P. Leblanc, formerly bookseller. In this catalogue we find an account, probably not far from being complete, of all known works that have been published in different languages and different countries up to the death of M. Huzard, which took place in November 1838.

For curiosity's sake, I have stripped this catalogue of the following summaries:—

I. VETERINARY MEDICINE PROPERLY SO CALLED:

1stly. Introductions. — Histories. — Dictionaries. — Journals. — 35 works.

(Many of these works consist of several volumes.)

2dly. Institution of Veterinary Schools in France and Foreign Countries.—51 works.

3dly. Anatomy of Animals.—22 works.

(Among which not many works on comparative anatomy are to be found.)

4thly. *General Hygiène*.—20 works.

5thly. *Treatises on the Diseases of different Animals*.—216 works, of which 4 are in the Latin language; 115 in French; 6 in Spanish; 31 in Italian; 54 in German, Swedish, and Dutch; 7 in English.

6thly. *Epizootics of the different Species of Domestic Animals*.—102 works, of which 28 are French.

7thly. *Veterinary Pharmacy*.—20 works.

8thly. *Sanitary Police*.—*Veterinary Jurisprudence*.—45 works.

9thly. *Cattle Medicine*.—296 works. French and foreign.

10thly. *Sheep Medicine*.—78 works. French and foreign.

11thly. *Pig Medicine*.—8 works.

12thly. *Dog and Cat Medicine*.—11 works.

13thly. *Horse Medicine*.—694 works, of which 12 are histories and dictionaries, 44 anatomical; the remainder physiological, pathological, and pharmacological, in different languages.

II. BREEDING AND MANAGEMENT OF STUDS.

1stly. *General and Special Treatises on the Education and Breaking of Horses*.—141 works, of which 125 are in the French language; 7 in Spanish; 5 in Italian; 8 in English; 24 in German.

2dly. *Treatises on the Knowledge of Horses*.—51 works in different languages.

3dly. *Treatises on the Exterior and Age of Horses*.—31 works in different languages.

4thly. *Treatises on Harness, Bridles, and Bits*.—22 works in different languages.

5thly. *Treatises on Shoeing*.—63 works in different languages.

III. EQUITATION AND RACING.—459 works in different languages.

IV. AGRICULTURE.—2480 works.

V. RURAL ECONOMY.—705 works, exclusive of works on silkworms and bees, and those of agricultural societies, which amount to 766.

So that I find 5812 works published in different languages and different countries, up to the year 1838, on the various branches of knowledge which have more or less direct bearing upon veterinary science.

I might now turn my attention to the books published since the year 1838, as well as the veterinary articles which have found their way into the different transactions of learned societies, French and foreign; transactions of which some limited account is to be found in the library catalogue of M. Huzard, among the series of works of the kind on veterinary matters. And some faint idea may be formed of their probable number, when we come to be informed that J. D. Reuss has devoted 80 pages, of small pica, solely to the enumeration of the titles of veterinary articles met with in the memoirs of learned societies published up to 1821. From which date the number has become strangely augmented, since in no former time has veterinary literature been so assiduously cultivated either in France or other countries.

As for the works published since 1838, their number must be very great. I could easily give the number of the French, but not of the foreign, of which but the principal are known to me. Among them, French and foreign too, are to be found a great number of periodicals in continual issue, and transactions of learned medical, agricultural, and veterinary societies, which are also continuous.

It would be very desirable to complete the list contained in Huzard's library catalogue, which most probably contains a pretty full account of all the works published before 1838. I have already commenced this task, and am only waiting for documents I have asked of foreigners to complete it.

Veterinary medicine was not so poor twenty years ago as represented. To those holding such an opinion, it is a sufficient answer to remind them of the dates of the different works published prior to that period.

CURIOUS CASE OF EXTRAORDINARY GESTATION IN A MARE.

By M. CAILLIER.

IN May 1834, M. Caillier had committed to his care a seven-year-old mare, that for some years had been given up for breeding, and who in the May preceding had been covered by a stallion ass.

At the time M. Caillier was called in, he found the mare's abdomen very large and sunken, appetite gone, surface of the body extremely cold, coat dull and harsh, membranes pallid, head in continual agitation, frequent yawnings, looking back often at flank, with sinking and approximation of the hind extremities, and unsteady painful step in walking, the fœtus exhibiting no sign of life.

The history given by the owner is, that the mare has not been near any thing likely to cause abortion ; that it is only two days since she appeared unwell ; that, when she first appeared so, the farrier of the establishment gave her a bottle of white wine, and afterwards some nitre and sweet oil ; and that nothing much was thought about her ailment, seeing that her time was expired, and that the movements of the fœtus have recently been observed. Indeed, the evening prior to my visit, the mare was said to have exhibited the ordinary signs of approaching parturition ; she having manifested expulsive efforts, which were followed by discharge of glairy matter, and considerable dilatation of the vulva. And when, further, was perceived filling of the udder and sinking of the abdomen, no doubt was entertained ; so that, next morning, when the owner came to enter her stable, and find no foal, he was struck with astonishment at discovering that all signs of foaling had vanished, to make room for others such as have been described.

M. Caillier persisted in his investigations. He introduced his hand into the vagina to explore the neck of the uterus, which he found hard and completely closed : an examination, which, resisted as it was in every way by the mare herself, led M. Caillier to suspect the presence of scirrhus. He bled her, used emollient fomentations to the vagina, administered injections, &c.

On his second visit, three days after, he found the mare had passed *per vaginam* glairy discharges, but in other respects was much the same. Notwithstanding, both the udder and the belly seemed diminished in bulk. She would eat a few handfuls of hay ; then she would withdraw her head to the length of her halter, and grind her teeth.

M. Caillier had her made secure, and then proceeded to a fresh examination *per vaginam*. He found he could not introduce the point of the index finger into the orifice of the womb, but was opposed by a hard tumour, of a firmness and volume not correctly appreciable.

The prognostic was now becoming despondent. Indeed, such was the gravity of the case, that he proposed performing the Cæsarian operation on the vagina ; to this, however, the owner was obstinately opposed, alleging reasons, which, if not absurd, were of little validity.

And so, according to her master's desire, the mare's case was abandoned to nature. For a couple of months she remained stationary : then, however, in spite of her having immensely fallen away, she was turned out to graze. This improved her appetite, and she seemed to be getting better ; and as she had sufficiently recovered her health and strength, she was again, on

the return of the coming season, put to horse, and was covered six times. Ten days afterwards she died.

Autopsy, made immediately after death, discovered, among the abdominal viscera, which had a healthy aspect, the womb represented by a voluminous hard substance, which, cut lengthwise, gave exit to a lifeless mule, very well formed, without the least sign of decomposition, not even any depilation. Its nose was so completely encased within the neck of the uterus, that, through compression, it had become elongated, and had its nasal cavities obliterated. The uterus itself, with its membranes, exhibited nothing extraordinary. After the symphysis pubis had been divided, the incision that had been made into the uterus was extended as far as the neck, the parietes of which were found in a scirrhus, tumid, yellow condition, and so hard that no instrument could be found to penetrate it without difficulty.

The thoracic viscera were sound. The head was not examined.

M. Caillier concludes this interesting account by observing that he abstains from all reflections on the case, further than remarking that the mare went *twenty-three months* with foal; and that the scirrhus affection, involving the neck of the uterus, proved the sole obstacle to parturition.

Extracts from Domestic Journals.

THE HUNTERIAN ORATION.

[From "The Medical Times."]

THIS annual address was delivered on Monday, Feb. 14th, by R. D. Grainger, Esq., of St. Thomas's Hospital, to a very crowded audience. Sir R. Peel, Sir R. H. Inglis, the Dean of Westminster, and the heads of the medical corporations, were present. From the low tone of voice, more particularly remarkable at the close of sentences, which detracted from the effect of Mr. Grainger's otherwise agreeable delivery, much of his meaning was lost to a great proportion of his hearers.

Commencing with a recognition of the circumstances of time and place under which the assembly had met, the orator indicated, at an early stage of his address, the particular direction which his remarks would take. Modestly avoiding an ambitious flight, he preferred to rest on his experience, as a teacher in a large medical school, his title to speak freely upon the past and present state of

organic science. He believed that a review of the nature and amount of physiological knowledge, as it existed at the time when he first was called to teach, and of its progress to the present time, would be full of instruction. That progress had not been the work of chance: it had been preceded by a rational cause, and depended on the same laws as did the advancement of human knowledge in every other department. Its degree had been so high, that it was surprising to him that it had not attracted greater notice among the educated and the learned. The generalization of the properties and laws of organic nature, within the last ten years, had attained an importance that could only be compared to the determination of the laws of chemical affinity; and that which had been hoped for as the fruits of some centuries of inquiry had been realized within a few years. He might cite, in confirmation, the discoveries of nervous connexions by Bell, and the theory of cell-formation of Schwann. But not only had the results actually obtained been sufficient of themselves for a subject of felicitation, the mode of investigation had been changed and placed in harmony with that of the other inductive sciences. To appreciate rightly the state of organic science as it existed till within a very short time, it would be necessary to discriminate between what was then positively known, and what dwelt in conjecture and uncertainty; for, unless this distinction was kept in view, the character of its subsequent progress could not be properly estimated. He would say that, in the anatomy and physiology of that period, the most striking feature might be characterised by the term *uncertainty*.

Of the ultimate and essential structure of bone, cartilage, nerve, epidermis, and their allied organs, nothing was known positively. The connexion of the vascular system and solid tissues, and the question of secretion and absorption, were left in vagueness and doubt, and no useful generalization could be established. The attempts that had been made to question Nature anew, by a process more analogous to the relative unity of the objects of knowledge to the human mind, had been successful in reclaiming the science of the body from speculation and doubt, and of placing it on the same basis as other positive sciences. The triple combination of *design*, *unity*, and *law*, he thought, had not been sufficiently present to the minds of preceding inquirers. It was first necessary to subvert the prevalent belief, that the phenomena of living bodies had something so peculiar and so distinct from those of chemistry and physics as to require a mode of investigation different from that of all other objects of knowledge; a doctrine which had always exerted great influence on the progress of anatomy and physiology. Minute anatomy was unknown, and secondary phenomena gave the laws to the most important functions of life.

When the teachers or writers on these subjects felt themselves at a loss, they were contented with urging the necessity of further inquiry, without shewing in what way or by what means it was to be prosecuted. Both teachers and pupils were only creeping about in the dark, accumulating facts which, from their diversity and contradictory aspect, only increased the difficulty of arriving at a general law, and strengthened doubts as to the trustworthiness of science. Among the most striking and instructive of the features of the present state of science was the fact that it is no longer proposed to cultivate the knowledge of the human organization by one or two means of research. Nor does the study of the human body alone, nor the aid of the microscope, of chemistry, and of embryology, suffice for the requirements of the present method of prosecuting the sciences of human life and structure. The physiologist is called on to appeal to the general laws of matter, whether organic or not. If it be said there is nothing new in all these methods, it is true, if it is meant that singly these means of knowledge have to some extent been employed; but it would be difficult to point to any age or country where they have before been combined into a system and directed to these purposes. Another important characteristic of modern inquiry was the part assigned to the purer intellectual function. Although no one could see more clearly than the orator the importance of emancipating the mind from the bondage of the senses, and that nothing but the strictest questioning of Nature would suffice, yet it was a fact that great promoters of science had, almost without exception, been industrious observers. Some had, indeed, appeared at long intervals who had seemed to reach great conclusions to some extent, independently of the senses. Harvey saw not with the bodily organ the junctions of veins and arteries on which the doctrine of the circulation is built; but the means of science must be adapted to the course of every-day study, and not to exceptional possibilities. It was by the microscope that those beautiful revelations of minute anatomy had been made on which future physiologists would delight to look back. The anatomy of muscular products exhibiting a fibre composed of two substances, distinct in their constitution, and enclosed in different cells, detected in the 18,000th part of an inch, was an achievement of which modern times might be proud. The great principle of the new school of physiology, which is so subversive of those of the former, was, that vascularity is secondary and subordinate, and not essential to organization, and might be dispensed with. It would be vain to attempt any definition of vital forces, and the same difficulty besets the naturalist in this respect. We know as much of vital forces as we do of those we call physical. The

views of Hunter on this subject were so much in advance of his age, that it required the lapse of half a century that his views might be appreciated; and now many persons were found to say, that the facts accumulated by Hunter would be valued when his speculations were forgotten. It was precisely on these depreciated speculations, as they were called, or rather as he would term them—those sublime generalizations and laws of vital forces—that the highest claims of Hunter to the veneration of posterity will most abidingly rest. There was no difficulty in comprehending that Hunter had a clear perception of two great truths:—First, that vital forces are possessed by the fluids as well as the solids of the animal body; and, second, that these forces are possessed by parts of the body non-vascular. The mere form assumed by matter is not an essential property, though we are accustomed to connect the idea of life rather with a solid than with a fluid. Thus, compound matter, water—in its three states of vapour, solid, and fluid—possesses, notwithstanding its change of form, its essential properties unaffected; and the same thing may be said of living substances, as the extended researches of modern physiologists leave no room to doubt. There is now no difficulty in comprehending what Hunter affirms, that the living principle exists in the different parts of the living body, independently of brain or circulation. It would be impossible for any physiologist of the present day to give a more precise expression than Hunter has done, to the fact that organization is essentially independent of vascularity. The first and most obvious fact which strikes an observer in contemplating the phenomena of the living animal is, that every thing seems to be peculiar and different from what has been observed in other bodies, inorganic or vegetable bodies; but it soon becomes apparent that the most important functions depend on the laws of chemistry and physics. The living body contains no new elementary substance; and we constantly encounter in the animal economy processes which have their counterpart in the chemist's laboratory. Speaking only of the body, we might say that physics and chemistry supply the forces of life.

After enumerating some of the names most distinguished amongst modern promoters of science, the orator proceeded to notice the deaths of Mr. Liston and Mr. Morgan, as a loss sustained by the profession since the last anniversary. Of the character of the former he read a delineation by Professor Miller, of Edinburgh. Mr. Liston was distinguished by high resolve, indomitable energy, and inborn consciousness of power; and was a zealous enthusiast in his profession. His eye was fine and sharp; his wrist reminded one of Nasmyth's steam-hammer, which drives a pile or touches a needle's point with equal aptitude. Professor Miller had

never seen it shaken, and did not believe it could have been shaken. His size and strength gave him great advantage in operations. He was particularly fond of instruments, and was always trying to simplify them, believing that the degree of their simplicity was the degree of their utility. Trifles were apt to put him out of temper, but grave accidents only rendered him more calm. He has been seen to rush out of the operating room to weep and sob, but in the scene of action he never shewed the least emotion. Obstructed in the midst of an operation, he never stopped to talk or scratch his head, but in an instant the thing was done. That, for him, was the best move that was accomplished on the spur of the moment. He had great powers of diagnosis and touch: a touch and a glance would do more for him than a whole day's meddling for some practitioners. He had great faith in the *vis medicatrix naturæ*, and would avoid the use of drugs whenever possible. He was firmly set against quackery in all its forms. As a teacher, he was neither fluent nor eloquent, but distinct and practical, with great power of gaining the attention of his pupils. Though second to no operator then living, he avoided an operation whenever the welfare of his patient could consist with such a course. He observed in a letter to a friend—"My principal business is to prevent the necessity of operating." Mr. Morgan was a most skilful as well as bold operator, and was distinguished for the attention he bestowed upon *medical surgery*. His writings, which were not numerous, were marked by great clearness and strength. The work on Poisons, undertaken in conjunction with Dr. Addison, contributed much to his fame.

Taking a general retrospect of the subject of his address, the orator drew an argument in demonstration of the existence of a wise Creator, from the delicate arrangements of the human body, more particularly brought to light in the achievements of modern organic science; and concluded an oration of two hours, which had been listened to with the most marked attention.

MILK.

[From "The Scottish Farmer and Gardener's Journal."]

OF all the animal fluids, milk, perhaps, is the most important, as being that which constitutes in every country a very important part of the food of man. It is produced by that order of animals which are termed *mammalia*, and it varies in its composition and properties to a certain extent, according to the nature or habits of

the animal which produces it. It is one of the most valuable articles of diet in some countries, and has been so from the most remote times. The wandering Arabs drink the milk of the *camel*, prepare butter from it, and the flesh of this useful animal is used by them as an article of food. The wild Tartar tribes make use of mare's milk in various ways, and are in the habit of preparing an intoxicating drink from it, which is relished by them in the same way as the inhabitants of civilized countries relish the finest flavoured wines which crown the boards of the wealthy*.

* * Milk constitutes the food of the young, and it is well calculated, from its known composition, to yield to the growing animal all the materials which are required to sustain its life and build up its body in all its various parts.

* * It is remarked that the milk almost invariably derives its qualities and flavour from the food which is given to the cow; and were it practicable to deprive certain kinds of food (which are commonly given to cattle for the purpose of increasing the quantity of milk) of that disagreeable flavour which they give to it, a very important end would be obtained in dairy husbandry.

* * Another circumstance which affects the quantity and quality of the milk, to a very considerable extent, is that of the particular *breed* to which the milk-giving animal belongs.

* * In many parts of the North Highlands the hardy black cow is exposed out all the winter, even when with calf, with little shelter from the inclemency of the season, and with little pasture besides stunted heath, with the exception of being treated to a very sparing quantity of hay and straw during the frost and snow; yet the hardy animal is frequently maintained in this way in a healthy and active condition till the time of calving, which is generally the spring. We remember hearing it said of a parish minister, some years ago, in Ardnamurchan, who was in the habit of allowing his cows to feed in the church-yard occasionally, that the milk given by them was the richest in the district. Climate has also a certain effect in the quality of the milk. It is remarked by Professor Johnston, in his Lectures, that a moist and temperate climate is the best adapted for producing a large quantity; whilst that of hot countries is calculated to produce the smallest quantity, but richer.

* Clarke's Travels.

DISEASES ARISING FROM IMPROPER FOOD.

[From "The Farmer's Herald," 1st February, 1848.]

CHEMISTRY has proved to us, that the starch contained in the food of animals undergoes in the stomach certain changes, distinct and well marked in their character; also, that in particular derangements of the stomach, the normal changes do not take place. This of itself gives rise to disease. When the starch is converted into sugar, and there the digesting process stops, or it may be into the elements of sugar, in such a state as the kidneys shall separate them from the blood in such a manner as they shall there form sugar—and give rise to *diabetes mellitus*—it is objected that the lacteal mesenteric glands take nothing but what is suited for nutrition. This may be true in so far, but we know that they do at times depart from this law. Professor Dick mentions a singular fact, that in a case of diarrhœa in a colt, where astringents were exhibited during life, on the death of the animal the mesenteric lacteals were found injected with the chalk; that substance was not, however, detected beyond the glands: it is still a question if they would so act during health. Various reasons have been assigned as to certain kinds of food acting as causes for the production of this disease: we think there can be no doubt of bad food having such a tendency. Spoiled oats have a most baneful effect on the stomach of the horse, and thus become the fruitful source of several diseases of fatal character, such as diabetes, farcy, glanders, and acute inflammation of the stomach. It is much to be feared that dealers in grain do not look for the best quality of oats, but for that which can be got for the smallest sum of money. Large quantities of very inferior grain are brought from the high parts of our country in what is termed late seasons, that is, cold and wet summers followed by harvests of a similar character, and in which frost makes its appearance at an early period. In these circumstances, much of the oats is in reality worthless for seed, and nearly so for meal: it is soft in quality, (partly malted) and black in colour. This arises from two causes:—first, it is not properly ripened; secondly, long exposure to rains after being cut. I am told this useless stuff is eagerly sought after by some dealers in and shippers of grain; and they contrive to give it the appearance of fine grain. They put it on a kiln, where it is slowly dried; this gives it firmness. They then subject it to the fumes of sulphur, and the dark colour is destroyed. The grain is then hard to feel, it is white to the eye, and the deception is complete. The effect of such food on hard-wrought horses must be injurious in the

treme. We have thought that a deficiency of free acid in the stomach might be one of the causes of diabetes; when sugar is treated with any hydrogen acid, it is converted into water and a carbonaceous compound. This would indicate the exhibition of such medicine or such food as would afford the elements of hydrochloric acid to the stomach. We would give tonics to keep up the strength of the animal. It would be of the utmost importance to the owners of horses to have the grain and hay, &c., they use for their horses thoroughly examined before purchasing. There is not the slightest reason to doubt, that the great majority of deaths that occur among horses arises from bad food and improper feeding. The veterinary surgeon is, or ought to be, able to give the owner of horses proper advice as to the quality of food, and the manner of feeding, best calculated to insure the safety of the animal, under the various trying circumstances to which he is subjected.

Professor Dick, in his lectures, mentions a case, where by improper feeding one farmer lost twelve horses within a very short time. In this particular case the evil arose from giving too much rich food at one time. Knowing the chemical action which should take place, and knowing also that it could not take place because the stomach was over-loaded, the Professor desired one-half the quantity of food to be given at one time, and no more deaths occurred.

J. McGillavray, V. S.—Scottish Farmer.

• THE VETERINARIAN, APRIL 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

“THE first Monday in May” falling this year, as it does, on the first day of May, the present is the only opportunity that remains to us of addressing a few words to our professional brethren on the subject of their General Meeting, before the time will arrive for them to assemble and hold that meeting, fixed by the charter to take place on the above-named day. There is no need for us to remind them, that this meeting, coming but once a year, and being one calling together the veterinary body at large, and one wherein business is transacted of more or less interest to all, is a meeting to them of no ordinary import. Thereat it is that every indivi-

dual member of the corporate body enjoys, freely and without reserve, the privilege of recording, in the presence of his assembled professional brothers, his sentiments and opinions, whatever they may be, on any and all matters under discussion ; nay, on this occasion it is that he is *invited* to do so. Those who have had most concern with the charter—who have had the labour and anxiety of obtaining it, and who have all along, under the trials to which it has been put, borne the burden upon their shoulders, and who are still found fighting manfully under its banners—these persons, we say, have from the very first sought the assistance and co-operation of their professional brethren ; and so far from having any ends or purposes of their own to serve—any private or selfish interest to forward—have all along, foolishly and culpably as it would now seem, admitted even their very enemies into their councils. Had their cause not been a sound one, a disinterested one, one intended for the *general* and not for their own individual benefit, it could never have stood such a test of magnanimity as this—never have maintained itself against the attacks and machinations of opponents armed with all the information the camp of the advocates for the charter could afford them in furtherance of their own sinister projects to destroy that charter. Nothing, we repeat, short of a sound and just cause could have borne an ordeal like this. And if any proof were wanting to confirm the integrity of the present charter, it may be found in the total inability of those who are opposed to it, either to bring forward an objection of any real weight or moment against it, or to strike out another charter that should be found worth any thing save inasmuch as it contains of the wise and wholesome provisions of its predecessor.

In the possession of such a charter as the one you have, and with men in your council who are resolved, through good report and evil report, to uphold that charter, and through it your interests, how is it, we ask, members of the profession ! you do not, as you are bound to do, come forward in a body to the General Meeting, and by your presence in ample numbers there, at once confound the politics both of anti-chartists and other-chartists ; while you convince those who entertain any doubts touching the popularity or working of your own charter, that such dubitations, and all allegations to the contrary, are but weak inventions of the

enemy? It was asked of one of the oldest and most respected members of the veterinary profession, by a first Minister of the State, into whose ear he had ventured to let drop an apprehension or two as to the probability of our losing our charter—"But, how does your charter *work*?"—"Well!" was the reply. "Oh! then," came the rejoinder, "You have little to fear." Now, what to any Minister of State, or to any other man of sound practical sense, could possibly demonstrate the working of the charter better than a full attendance of members at the General Meeting? And, exists there a doubt that, when the state of affairs comes to be known, such will not be the case at the forth-coming meeting? None, we should hope, whatever. Let every member who in his heart wishes well to the cause of the charter—and he is no friend to the veterinary profession who does not—in such perilous time as these, *make a point of then and there attending in his place*, and let him hold up both his hands in the defence of his own—his struggling corporate body. Let him remember that the present representative charter lost, nullified, or anywise antagonized by other charters—this sacred bond of the profession once broken—away goes all self-rule, all freedom, and we from that moment become mere agents in the hands of the schools, to eventually dwindle down once more to a level with a class of men from whom, through the powerful aid of our charter, we have but now, *by law*, for once and ever emancipated ourselves. Throw away this chance—we say to you, fellow-members!—and you may never expect, in your time, to see another. Seven hundred pounds sterling, and more labour, bodily and mental, than we dare make an estimate of, have been paid for a charter which has defied its greatest enemies to pick a hole in it, and which admits by acts of Parliament hereafter to be appended to it, of being made all that the professional body can ever hope or desire; and yet, is all this money and labour and excellence to be made shipwreck of?—and for why?—because, forsooth, a charter which has been found to suit the best views and interests of the profession by whom and for whom it has been obtained, does not happen to *meet the interests* of the schools of the Royal Veterinary College of London, and of the Highland and Agricultural Society of Scotland.

We had penned the foregoing appeal to the profession, when we received Mr. Mayhew's portraiture of "things as they are" at our Royal Veterinary College. Cordially do we congratulate our readers, as well as ourselves, on the resuscitation of Mr. Mayhew. Of the well-known cause of his so long silence let not another word be said. Let it suffice for us to know, that—

"Richard is himself again,"

and will in battle-front his prowess show. Mr. Mayhew's feelings would not have been widely different from our own when he wrote the lines, "The veterinary profession, however, must now shew its feeling. If the charter have their support, *the fact must be demonstrated*. In such a cause every individual must act as if the issue depended on his single arm. All know what has been. They are aware how their wishes are opposed, and their best interests endangered."—But, stop! What comes next? Nothing less than "the threatened plan"—a plan the concoction of which receives additional evidence from Mr. Cherry's communication—"of manufacturing illegal diplomas." If which "be carried into effect," adds Mr. Mayhew, "the consequences will not be slight." Indeed, they will not. Valueless, worthless, as the certificate will be, derived from any examining board so constituted, without the pale of the charter, yet are the public not sufficiently informed on such matters to be able, unassisted, to make a distinction between one diploma and another—between, as Mr. Mayhew has happily expressed it, "the false and the true paper;" and, therefore, adjuncts to the *legalized* diploma will become necessary to its verification. The one suggested by Mr. Mayhew is an artistic *chef d'œuvre*, consisting in a cast from the model of the crest of the Royal College of Veterinary Surgeons; and, under the restrictions to which it is proposed it shall in strict honour be subjected, a valuable as well as an ornamental possession it cannot fail to prove. Another recognition, an undeniable one, and protection, the incorporated practitioner will enjoy will reside, permanently and for ever reside, in his REGISTRATION. In that honourable and indisputable enrolment will his name stand, promulgated in every corner of the country, while the "College List" will remain, where it ever has been securely kept, screened from the dust as well as from the

public eye, upon the book shelves of the worthy Secretary of the College, Professor Sewell,—to be ever and anon handed to a “Subscriber,” should he perchance ask for “The Regulations of the College,” to which “a list of veterinary sugeons” comes, as a sort of incidental appendix, by way of eking out the printer’s sheet, which the names and addresses of the subscribers, though given at full length, are found insufficient to fill up.

There is a remark or two in Mr. Walton Mayer’s address to the agriculturists of Great Britain, on the engrossing subject of Pleuro-pneumonia, which we are unwilling to let pass unnoticed. “It is impossible,” says Mr. Mayhew, “to make every man his own cattle-doctor.” So think we. But so thought not the renowned Clater, whose work, entitled “Every Man his own Cattle-doctor,” went through, we think, somewhere about seven-and-twenty editions: a convincing proof, according to the author, as stated in one of his prefaces, of its excellence. To this, however, we take occasion to demur. The little experience we have had in such matters has been sufficient to convince us that the sale of a book of a mediocre class is more influenced by the publisher than by the merits of the work itself; and the circumstance of Clater’s and White’s, and other veterinary works being the property of associated publishers, sufficiently accounts for the unparallelled sale they have had. Only let a man get up a work holding out “recipes” and “cures” for every thing, and make it the interest of an influential publisher to father it, who will *invite* certain journals to puff it, and the sale of the book is insured, the public being every way gulled to their hearts’ content. This is one reason why cattle-medicine continues to be in many parts of the country so barbarously practised. Another reason for the unadvanced state of this branch of veterinary science being, as stated by Mr. Mayer, the little attention the “colleges,” have paid to it, compared to the cultivation that has been given to horse medicine. Regard but for a moment the condition of the two branches of science. On the one hand, look at the perfection to which all medical matters concerning horses have been brought; and, on the other, look at the lamentably depressed state of cattle, and sheep, and we

might, we believe add, dog-medicine! Had equivalent study and pains-taking been bestowed on the latter, would the farmers and graziers of the present day have to deplore the loss, year and year, of their valuable stock through pleuro-pneumonia? Had such a disease ravaged our stables, as it has done our cattle sheds, should we be looking on instead of working out its cause and its nature, and in the end hitting upon its cure or prevention? Can any body taunt us with any ill-understood, or uncured, or unprevented disease affecting horses? Glanders, it may be said, remains incurable. Granted! But how rarely does it occur now-a-days, compared to what it did in former times? Have we not, through prophylactic measures, all but banished the invader from our large horse establishments—from the army, from collieries and breweries, post and coaching and farm stables? And is not “prevention better than cure?” Had pleuro-pneumonia, as the malady is called, spread among our horses as it has among our cattle—and who is bold enough to say horses are not subject to such a disease?—it would have met long ere this with a successful combatant out of our pharmacopœia. But, so long as cattle-medicine is left in the hands of “an enlightened public,”—so long as every man is to continue his “own cattle doctor,”—so long as cattle-medicine is suffered to remain a dead letter at the veterinary colleges, so long must and will our cattle, the pride of our country, fall victims to the dreaded pleuro-pneumonia.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—Hon.

THE CREST OF THE ROYAL COLLEGE OF VETERINARY SURGEONS. *Modelled and published by J. BAILEY, 8, Conduit-place, Paddington.*

A CAST of this figure is before us; and really there are few crests which could be made to represent so agreeable an image. There is about it so little bearing any relation to heraldic taste that a person uninformed of the artist's design, would naturally conceive it

to be the embodiment of a poetic idea. Simply regarded as an ornament, it therefore would be esteemed, but received in connexion with the object of its creation, it has an interest and a value independent of its merit as a work of art. The execution is very free, and represents rather a spirited sketch than a laboured model. The vigour of the conception, far more than the pains of the artist, is felt by the spectator. Saying this, however, we do not mean that the work has in any degree been slighted. On the contrary, we are of opinion the idea has been judiciously embodied, and carried out to that point which leaves the intention more conspicuous than the mechanical skill of the modeller.

The image stands about two feet nine inches in height, measuring from the head of the centaur to the bottom of the plinth. The compound animal is exhibited rearing into the air. To gain strength, no tree or rock has been introduced, but the body is supported by the hind legs and tail, which last is represented as touching the earth. Without detracting from the effect of the prancing attitude of the horse, sufficient substance has thus been obtained to uphold the weight. Grace and lightness are thus gained, while the notion of solidity is also conveyed. Further advantage, likewise, springs from this mode of treatment. The hind-parts have been made to balance the forward mass. The whole has been rendered harmonious by that sense of proportion which has by a trivial licence been introduced.

More masterly, however, is the manner in which the body of the man has been made to blend with that of the beast. Fabulous though the idea may be, Mr. Bailey has so represented it as to make the union appear possible. The two creatures seem one animal. The shoulders of the horse by a little play have been made to personate the groin of the human being, the lower portion of whose spine leads easily into the line of the animal's withers. In action, also, the unity is perfect. The man is not the rider merely, aiding the leap or studying to maintain his seat. Leaning back, to throw the weight more under the centre of gravity, he seems to share the act, and by the confidence of his expression denotes his will called forth the motion.

We like this figure much. There is in it no sacrifice to prettiness. In its proportions it is large, and its beauty, in our opinion, is the greater, because its aspect is even somewhat rude. On that very account we esteem it to be more perfect. The fable of the Centaur is of barbarous origin; and here the man appears a creature ordained to rule, but unsoftened by refinement. The horse is not the admired of the stable. It does not display the points which constitute the delight of modern breeders. The offspring of the wild—joying in its power and vigorous in its freedom—it careers like life

that yet had known no bondage. A savage aspect is stamped upon the form, indicating the age when such a monster was believed to trample upon earth.

The lines flow gracefully. They lead to and run out of one another in a manner which is more than pleasing. On the merits of the work we have, however, probably said sufficient to give the reader an idea of our opinion of its worth. We have now to speak of its application and fitness for the purpose which caused it to be executed, and here we see much that calls for praise.

When the charter is attacked, and the rights of the veterinary profession threatened, the image which was to represent the crest of the incorporated body almost necessitated some allusion to the circumstances of the time.

Without making this so conspicuous as to render the meaning offensively prominent, we must imagine the feeling has been embraced. The centaur holds the shield on which the aloe is relieved as if he were proud of its possession—capable and determined to retain it. He does not stand on even ground. Rugged is the place he treads, but still it indicates an upward course. The difficulties of the path are symbolized, but veterinary science, undismayed, ascends the rock, which yields but little to nurture or reward.

A compliment which our heart tells us is deserved has been delicately expressed. Lest it should not be comprehended, the motto lies upon the ground. The words teach us for whose service the model was designed.

Sincerely do we hope this work may be strictly kept to the intention which originated it. If it can be thus limited in its circulation, we have no doubt but its utility will soon be felt. The veterinary practitioner has too often to deal with ignorance. Not for himself, but for a large portion of his employers, especially in the country, was some symbol wanted to denote the title of the qualified. This appears to be the thing that was needed. An ornament such as a gentleman may admire, not a sign such as a bumpkin only would commend. Far removed from vulgarity, it yet is striking; nor can we conceive there will be any thing derogatory in its display. The nobleman with pride places his coat of arms above his gate; and surely the veterinarian who exhibits the crest of the college to which he belongs in his surgery displays a feeling that none could condemn.

In conclusion, we enter fully into the wish of the gentleman with whom the idea has originated. He has, however, undertaken a responsibility such as will demand much caution, and occasionally some firmness. There is no desire on our part to question his intentions, or to doubt his fitness for the office he has assumed. Let

us, however, remind him that the veterinary profession, if they accept the security he offers, will not hereafter be content to find the pledge has been violated. He has voluntarily undertaken a duty, and is bound to discharge it strictly. With the profession generally it will remain to keep the model sacred to the purpose of the originator. Honour, we think, should bind both parties, and certainly ought not to have the least force upon those who will be the greatest gainers by the engagement.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of March 8, 1848.

QUARTERLY MEETING.

Present—the PRESIDENT, the SECRETARY, Messrs. MAYHEW, WILKINSON, HENDERSON, ARTHUR CHERRY, ERNES, and CHERRY, sen.

THE minutes being read and confirmed, Mr. *Henderson* moved, and Mr. *Wilkinson* seconded, “That the Committee appointed to draw up the draft of Reply to the proposed Charter, be re-appointed, and that Mr. Mayhew be added thereto,” which was carried without opposition.

Mr. *Arthur Cherry* moved, “that the following Gentlemen be added to the List of Corresponding Members:—Messrs. Lepper, sen., Aylesbury; Rogerson, Bedford; Martin, Chesterfield; Lucas, Lutterworth; Brown, Melton; Wells, Norwich; Vincent, Devizes; Lucas, Atherstone; H. Draper, Leighton Buzzard.”

Several letters were read from parties respecting the next examinations, which were severally disposed of, a short discussion ensuing, but not of sufficient importance for particular notice.

Adjourned.

MISCELLANEA.

CHLOROFORM ADMINISTERED TO A PIG.

WINTER is a fatal period for pigs, and right glad, no doubt, the majority of the “grunt creation” would be to quit existence upon more agreeable terms. The other day, Mr. Horace Watson, druggist, Laceby, near Grimsby, caused our friend the butcher to ad-

minister through piggy's monstrous nostrils *quantum sufficit* of chloroform. "Grunt," naturally fond of sleep, was soon in the land of forgetfulness, when our hero in the "blue frock" very conveniently extracted the requisite portion of vital fluid, leaving the pig, after being scalded, cut up, and salted, apparently not a whit the wiser for what had passed.—*Scottish Farmer and Gardener's Chronicle*.

THE RHINOCEROS.

AFTER travelling four days over a dry and trackless part of the country, occasionally meeting with a few of the poor Bechnanas, we came to a fine valley, Mosite, in which were some pools, and plenty of game, especially the rhinoceros. Having shot one of these ponderous animals, we halted a day to prepare the meat, by cutting it up into slices, and hanging it in the sun to dry. One would have been more than sufficient for our company; and it was only at the urgent request of the poor people that a couple more were shot, as they very rarely succeed in killing such animals, except it be in a pit-fall.—*Robert Moffat's Labours and Scenes in Southern Africa*.

WILD DOGS' CHASE.

DURING our stay at this place, a circumstance occurred which may throw some light on the habits of these people, while it confirms the old adage, "that the one-half of the world does not know how the other half lives." It was at noonday when a fine large hartebeest (Khama of the Bechuanas), the swiftest of the antelope species*, darted close by our wagon, and descended towards the extensive valley. Started by so unusual an occurrence, one of the natives called out, "It is the wild dogs;" and presently the whole pack made their appearance, following their leader, which was pursuing the antelope. We seized our guns to attack them as beasts of prey. The poor people who were sitting around their flesh-pots started up and followed, begging of us most earnestly not to kill the wild dogs, for they were their providers. We of course laid down our guns again, and directed our

* "The Hartebeest is one of the finest animals of the antelope family; it is fleet, and graceful in its gait. The male is about seven feet long and five feet high, with handsome recurved horns growing from approximated bases. The female is of a smaller size. The flesh is good, and bears a considerable resemblance to beef." *Pringle*.—There are immense herds of these animals in the interior, and generally of a larger size than the above.

attention to the Khama, which was soon overtaken and seized by the hind leg. It turned round to defend itself, and then started off till again seized by the wild dog. As we had, in a measure, retarded the speed of the pack, about thirty in number, the single dog, which was engaged baiting the Khama, looked round, and gave a piteous howl for his companions to come to his assistance. When they overtook the poor animal, they fell upon it with one accord, and instantly brought it to the ground. One of my men ran off in order to secure a piece of the skin, of which he wanted to make shoes; but by the time he reached the spot nothing remained but bones, and those well picked: these the poor people afterwards collected for the sake of the marrow. On farther inquiry, I found that these people are in the habit, when they see an antelope, or even an ostrich, pursued by the wild dogs, of endeavouring to frighten them away, that they may come in for a share of the prey. One of the men, with much feeling for himself and companions, said, patting his hand on his stomach, "Oh! I am glad you did not shoot the dogs, for they often give us a meal." At another place, the poor people were very glad, on the same account, that we had not killed the lion which had been troublesome to us during the night. These children of the desert very promptly described the manner of the wild-dog chase, which I have since had opportunities of witnessing. When the dogs approach a troop of antelopes, they select one, no matter how it may mingle with others on the dusty plain: the dog that starts never loses scent, or, if he does, it is soon discovered by the pack, which follow after, as they spread themselves the more readily to regain it. While the single dog, who takes the lead, has occasion to make angles in pursuit of his prey, the others, who hear his cry or short howl, avoid a circuitous course, and by this means easily come up again, when a fresh dog resumes the chase, and the other turns into the pack. In this way they relieve each other till they have caught the animal, which they rarely fail to accomplish, though sometimes after a very long run. Should they in their course happen to pass other game much nearer than the one in pursuit, they take no notice of it. These dogs, of which there are two species, never attack man, but are very destructive to sheep and goats, and even to cows, when they come in their way. On another occasion we had passed the night without food; and after a long day's ride, the sun was descending on us with little prospect of meeting with any thing to assuage the pains of hunger, when, as we were descending from the high ground, weak and weary, we saw, at a distance, on the opposite ridge, a line of dust approaching, with the fleetness of the ostrich. It proved to be a spring buck, closely pursued by a wild dog, which must have

brought it many miles, for it was seized within two hundred yards of the spot where we stood, and instantly dispatched. We, of course, thankfully took possession of his prize, the right to which the wild dog seemed much inclined to dispute with us. I proposed to leave half of it for the pursuer. "No," said one of my men: "he is not so hungry as we are, or he would not run so fast."—*Robert Moffat's Labours and Scenes in Southern Africa.*

PUTTING A YOUNG HORSE ON THE BIT.

As a practice of submission, placing him on the bit is good—not to improve his mouth, it spoils that; for colts left in this way, tightly buckled up, bear heavily, and even go to sleep on the bit. The immediate consequence is raw, and afterwards callous lips. It is better to fix the straps from the cross and pillars to the cavesson, instead of to the bit. Cleaning him on the bit, that is an easy colt's mouthing-piece, is an admirable practice. The reins should be on the sides of the stalls, and the horse's head towards the manger. When dressed in the pillow straps, there is danger of capping his hocks by kicking against the manger.—*Hints on Horsemanship.*

CHIFFNEY BITS AND BRIDLE REINS.

As the collected paces of the parade are not in vogue in England, a gentleman rarely has occasion for his curb at all, unless it be to train a horse for a lady, or in the case where a commanding power is required with a horse, who, by bad or cruel handling, has become habitually restive (for I disbelieve the existence of one *naturally* so), or whose animal impetuosity or ferocity leads him to attack his neighbours. In such a case, a Chiffney bit, on the principle described, with half the length of branch, and a third part of the weight, will be found more effective than a clipper bit; and at the same time that weight is got rid of, danger is avoided, which, with branches running far below the horse's mouth, is very great in going through living fences or coverts. The reins should be extremely thin and supple: they will last the longer for it. Reins break from being stiff and cracking; and suppleness of reins is essential for delicacy of hand. With such a bit, so placed (low in the mouth) I have seen the tips of the most beautiful fingers in the world, constrain the highest mettled and hottest thorough-bred horses, and—

"Rule them when they 're wildest."

Hints on Horsemanship.

THE
VETERINARIAN.

VOL. XXI,
No. 245.

MAY 1848.

Third Series,
No. 5.

MEMORIAL.

*To the Right Honourable Sir George Grey, Bart., Her Majesty's
Principal Secretary of State for the Home Department.*

THE MEMORIAL OF THE COUNCIL OF THE ROYAL COLLEGE
OF VETERINARY SURGEONS,

Humbly sheweth,

THAT your Memorialists lament the necessity they are under of trespassing once more on your attention. They have, however, no choice. The rights which they are elected to protect are attacked, and the little which is possessed by the profession by whom they are appointed is endangered. Under such circumstances to be silent would be to betray the interest your Memorialists are bound by duty to uphold.

That your Memorialists are not aware that their conduct has provoked the opposition to the Charter under which they act. They have studied to forbear and to conciliate. They have made concessions, and been patient under aggression. They have been desirous of elevating the profession over which they preside, and anxious to promote the science to represent the interests of which they are elected. They have exercised their authority with caution, and used the power invested in them with prudence.

That your Memorialists are not conscious of having done wrong. They humbly ask what interest they have injured, or who has just reason to complain of their conduct? The veterinary profession give them support, and the public have not found fault with their acts.

That your Memorialists know only of one source from which any opposition has emanated. That opposition sprang from and is upheld by motives which cannot be defended upon public grounds. It is a movement kept alive by individuals. Under the pretence

of defending public rights it seeks to establish personal authority, to sanction professional abuses, and to enlarge private interests. It is not animated by a spirit which can be commended. It was begun by the Professors, and by them it has been upheld.

The Professors have boasted that the present opposition was by them commenced. It is notorious that it arises solely from a fear lest the institution of a higher qualification in the candidates for diplomas should decrease the number of pupils at the Colleges, and thereby diminish the source whence the emoluments of the Professors is derived.

Such fear is groundless. The number of students at the Colleges has increased since the Charter gave to the veterinary profession its existing rights.

That, if such fear were real, your Memorialists would participate in it, since one portion of the means of defraying their expences is obtained by the examination of gentlemen wishing to become members of the Royal College of Veterinary Surgeons.

That the names of the other parties which appear appended to the petition for a new Charter, in the opinions of your Memorialists, are of little weight; the persons who thus petition having been instigated so to do by statements which cannot be substantiated. They are not acquainted with the truth, or they would not lend their countenance to an agitation which cannot be honourably maintained. They are misled and deceived. They act under false impressions. They have not inquired into the circumstances, and they are ignorant of the facts. Their motives are pure, but their knowledge is deficient. They mean well, but they are mistaken. Their intentions are noble, but their convictions are unfounded. They have heard strange assertions and heavy accusations, but they have not sought for explanations from the accused, or endeavoured to corroborate the charges made by the accusers.

Your Memorialists are anxious to defend their conduct. They are prepared to answer for all that they have done. Their acts are open, and their motives undisguised. They invite inquiry.

The Governors of the Royal Veterinary College of London ask for a new Charter. They do so knowing little of the Institution over which they nominally preside. At that school no minutes are kept. Over it no one is placed to watch the actions of the teachers. It is left to these teachers. The Governors do not often enter it. The Professors make report of their own conduct. Complaints must be made through the Professors. Improvement must be sought through the Professors. The Governors seldom meet, and are difficult to approach because of the Professors, through whom they must be addressed. Under such a system injury is silenced and abuse is strengthened.

The School is subjected to no supervision. Though ostensibly founded to advance veterinary science, it is secured from the possibility of inspection. The lectures are not published: no plan of study is laid down. The Professors teach that which and so much as they please. Their doctrines may be wrong, but there are no means of correcting them: their teaching may be dangerous, but there is no power of restraining it: their information may be limited, but there is no ability to improve it: their industry may be deficient, but there is no authority to stimulate it—they have only to report to gentlemen who, however enlightened, can hardly be supposed to know all the points which a peculiar education should embrace. The veterinary profession, who might judge correctly of the fitness of the instruction and the qualifications of the instructors, are by a special vote excluded. No member of the Royal College of Veterinary Surgeons may become even a subscriber to the Institution.

The School attached to the Royal Veterinary College is a mere appendage to that Institution. It is not upheld upon any public grounds, neither does it confer any gratuitous advantages. For all it gives it demands payment. The pupils pay for that which they receive. The money thus obtained goes to the Professors: the Professors so remunerated attend to the animals of the Subscribers; the School, consequently, enables the Governors to retain the professional services of the Professors at a small tax upon the funds of the College. The School is a source of profit, and a benefit to the Institution. It is no more than a remunerative speculation, and has no claims to the consideration of the State. Its appointments are strangely deficient: there is no apartment in which the Students could wait the commencement of the lectures, or seek shelter from the inclemency of the weather. No Reading-room or Library is connected with the College. The Museum is locked against the students, and no prize of any kind is offered to stimulate the exertions of the pupils. Compared with a barrack or a charity school, the Royal Veterinary College would seem to offer the poorer accommodation and the least incentive to study.

If the Institution presents little entitling it to be regarded as a College, it certainly exhibits nothing approaching to a Hospital; in which character, however, by a general mistake, it is commonly viewed. There is no charity attached to the Institution; neither can any but Subscribers share the benefits it is presumed to bestow. It does not pretend to generosity, and the animals of the poor are not admitted inside its walls. It is strictly a private society, supported by individuals induced to join it solely by the offer of pecuniary advantages. Its members require no recommendation beyond what the payment of the annual subscription

may imply. Lucrative, circumscribed, and irresponsible, it exists as a combination of individuals, held together only by the prospect of pecuniary saving. The prospectus issued by the establishment holds forth no inducement beyond what a trading association would embrace. To sell medicine cheap to its members, and to treat the animals of its subscribers at a low charge, is the single motive upon which it relies for support. By its regulations it has refused to co-operate with the veterinary profession, and by its practice it competes with the veterinary surgeon—not on the score of merit, but on the plea of cheapness. It is fortunate in the patronage it enjoys, happy in the wealth it has accumulated, and secure in the privacy which surrounds it. Fostered, rich, and undisturbed, it has no claim to public support, or any pretence to public sympathy. Compared with other colleges, it exhibits rather that which calls for correction, than any thing deserving of special and extraordinary confirmation.

While making so serious a statement, your Memorialists have been cautious to advance nothing which does not admit of easy proof. Nevertheless, your Memorialists beg to express their conviction, that the Governors of the Royal Veterinary College of London are not aware of the real condition of the Institution, which was originally founded upon public principles. The remembrance of these is probably retained, and the report of the Professors may lead to the belief that such principles are observed. As gentlemen, the Governors give their confidence to those whom they employ: conscious of their own integrity, they refuse to entertain suspicion. This feeling your Memorialists admire; but under its operation abuse too often is engendered. By degrees, security from inquiry induces neglect, and gradually a noble design is perverted. At length, the magnitude of the evil disciplines those in power to undertake the supervision; abuse grows into a system, and, under the sanction of usage, offence is protected. By passing the annual report of the Professors, the Governors have appeared to approve acts which, on consideration, they might condemn. An inquiry is needed, but none has been instituted. The Governors lack the information which would acquaint them with the moral and actual position that they hold. Their purpose is generous, and their design is noble; and your Memorialists, while representing facts, deny all intention of insinuating one word against the integrity of motive by which the Governors of the Royal Veterinary College of London are actuated.

The gentlemen constituting the Highland and Agricultural Society of Scotland appear as Petitioners for a New Charter: your Memorialists regret to see such names appended to such a

prayer. Towards that high and influential body your Memorialists profess the deepest respect. The Society, however, is by distance separated far from the Council of the Royal College of Veterinary Surgeons. Removed from the possibility of personal communication, the Society has not sought to learn the objects or intentions of your Memorialists. Your Memorialists are willing to communicate, and anxious to be observed. No secrecy is established, no privacy is desired. The wish of your Memorialists is to be known and to be understood. As a public body, they court publicity: as responsible agents, they ask to be instructed. They desire to know the evil they might correct, and wish to learn the good they can effect. Nevertheless, the Highland and Agricultural Society have transmitted to the Council of the Royal College of Veterinary Surgeons no remonstrance; neither have they addressed any complaint. They have asked no explanation, and they have requested no statement: they have not asserted that which should be done, or expostulated against that which had been done: in silence, they have allowed your Memorialists to proceed, making no proposition, and urging no objection. Your Memorialists, therefore, are ignorant of the circumstances which cause the Highland and Agricultural Society to be their opponents. Your Memorialists lament the fact, and regard it with surprise. To your Memorialists, it appears extraordinary that a high and honourable Society should undertake a direct and active opposition without first investigating the circumstances which alone could justify such a proceeding. The Society, however, did not commence the movement. The Professor of the Edinburgh College had declared his discontent before the Society joined the parties petitioning for a new Charter: with that Professor the Society is in communication. Acts may be misrepresented, and motives may be implied; consequences may be foretold, and interests may be alarmed. Where one party alone is heard, the truth is seldom learnt. The Edinburgh Professor openly threatens, and without disguise declares his animosity. From that source the Highland Society have derived all the information they possess. Deeply solicitous for the advancement of science, the Society has been induced, by interested arguments, to adopt a course which, on inquiry, your Memorialists feel convinced they would immediately relinquish. That Society desires the exaltation of the veterinary profession; but, if the prayer they urge could possibly be granted, the result would be the elevation of individuals upon the degradation of veterinary science.

In proof that, on inquiry, the Highland and Agricultural Society would find they had no just reason to complain, your Memorialists confidently refer to the honourable conduct of the Royal Agri-

cultural Society of England. The object of the two Societies being the same, that which the one can approve ought not to displease the other. The Royal Agricultural Society of England, induced by the representations of the Professors, were once opponents to the Charter of the Royal College of Veterinary Surgeons; your Memorialists, however, having opportunities of communication, and being located where their conduct could be watched, sought to explain their powers, and to justify their proceedings; your Memorialists gratefully acknowledge their representations were entertained. The result has been, that the Royal Agricultural Society, after mature consideration, recognizing the scope of the existing Charter, and witnessing the conduct of the Council, no longer appear as Petitioners against the Royal College of Veterinary Surgeons.

The Professors of the Colleges are the parties with whom the Petition originated. They drew it up, and they are the persons whose activity caused it to be signed: on their assertions the agitation was commenced, and in consequence of their representations it is continued.

“Your Memorialists decline to insinuate the motives by which the Professors are actuated, but they humbly beg you, Honourable Sir, to weigh the following facts:—

The Charter gives to the Royal College of Veterinary Surgeons the power of appointing Examiners to test the qualifications of those gentlemen who may be desirous of becoming members of the veterinary profession. This power indirectly, to a certain extent, controls the teaching of the Professors. In some measure it makes known what has been taught at the schools:—it places the Professors, in some degree, under responsibility—it inquires into the attainments of the pupils, and therefore it insists upon the efficiency of their instruction.

Such is the only power connected with the schools which the Charter confers upon the Royal College of Veterinary Surgeons, and such is the only responsibility to which the Colleges are subjected.

The establishment of such power was not a novelty, since it had been in operation for many years over the medical profession; for the existence of such authority there was, therefore, ample precedent. To prove that it was wholesome in its influence, and by no means injurious in its effect, the acquiescence of a learned and noble profession affords the most decided evidence. To shew that it has been abused by your Memorialists no statement is advanced, but to demonstrate that it has been considerably exercised facts may be appealed to.

To guard against the possibility of abuse, your Memorialists

have created the Professors of the Colleges *ex officio* members of the Examining Board, thereby giving to those gentlemen the means of watching the conduct of the Examiners. To shew such conduct has been guided by principles of liberality, it can be proved that the Professors have not seen the necessity of their being constantly or regularly present when the Board of Examiners has assembled ; indeed, for nearly two years they have not availed themselves of the privilege thus afforded them. To establish that the present system inflicts no injury, the testimony of the Professors themselves may be referred to, since, in the proposed draft of a new Charter, it is contemplated, so far as the Board of Examination is concerned, only to confirm the position which under the present College the Professors already occupy.

To demonstrate that a power of supervision was imperatively demanded, a host of evidence can readily be produced. When, previous to the grant of the existing Charter, the Professors were examiners of their own pupils, the complaint was general that diplomas were bestowed upon persons unfitted to enter into practice. The period of study was uncertain, and the system of teaching was unsatisfactory. The Professors sought to inculcate their peculiar ideas, and to these the pupils paid attention, rather than to recognized and established principles. The opinions of the Professors were in opposition, and frequently the teacher changed his notions, denying in one course of Lectures those doctrines which in the previous Session had been vehemently insisted upon. Diseases of vital importance were passed over, and errors of fatal consequence were propagated. Glanders and Rabies, the two disorders which to the agriculturist and to the human race are of especial and peculiar interest, were for years never explained to the students.

At the present time the mode of education is far from satisfactory. The anatomical instruction is still deficient ; the Professor of Anatomy, instead of lecturing upon the nerves, veins, absorbents, muscles, and ligaments, referring the pupils to the dissecting-room for the information which it is his appointed duty to afford.

After more than fifty years, the Professors at the Colleges are ignorant of the anatomy of the animals, which a veterinary education, properly conducted, ought to embrace. In the London College the skeleton of the dog has the bones placed in wrong situations. In the dissection-room, donkeys only are dissected. The carcasses of sheep, pigs, or oxen, are not to be there seen : even living specimens of such animals are rare ; since one pupil, in answer to the complaints of the Chairman of the Examining Board, that the replies elicited upon cattle pathology were unsatisfactory, openly stated that, during an attendance of two years at the Royal Vete-

rietary College of London, he had seen within the walls or School of the Institution but two cows.

To illustrate the scope of the teaching and the spirit of the London Institution in which the Professors are employed, your Memorialists will allude to one circumstance :—That College had been in active existence since the year 1791. It had become rich, and had funds at its disposal. It professed to investigate the diseases of animals, and to educate veterinary practitioners in whom the public might confide. Up to the year 1841 no lectures were given upon the diseases of cattle. At that date a Professor was appointed ; not however because the want of his services was felt by the Governors, but because the Royal Agricultural Society of England, to induce such appointment, consented to contribute two hundred pounds annually towards the maintenance of the teacher. The Governors of the Royal Veterinary College were actually paid to carry out the purpose of their establishment ; and took money to do that which the name of the Institution confessed it was their duty to perform. The two hundred pounds were paid by the Royal Agricultural Society for seven years ; but the result of the teaching has been so unsatisfactory, that the contribution has been directed to be withdrawn.

Such a fact cannot be misunderstood ; but lest it should not be entirely conclusive, your Memorialists will allude to the acts and practice of the Professors, shewing that in the assumption of superiority those persons are wholly unsupported.

When, in the year 1840, a disease known by the name of the Vesicular Epizootic appeared among cattle, the London College was by the Royal Agricultural Society requested to draw up a plan of treatment for the instruction of the farmers. This plan of treatment was formally drawn up, and extensively circulated ; but the measures therein recommended were so erroneous in theory and injurious in practice, that, instead of being a method of cure, they proved to be a ready means of destruction. Great loss ensued, until, by the labours of the veterinary profession, the nature of the affection was pointed out, and the proper course of remedy adopted.

In the foregoing statements your Memorialists must here say, they refer only to the Royal Veterinary College of London ; and, while submitting such statements to your consideration, your Memorialists are desirous of exempting from any censure that may be therein implied the Professor of Chemistry at that Institution. To the talent and industry of the gentleman holding that appointment your Memorialists with pleasure bear witness, and testify to the creditable manner in which his pupils generally appear before the Board of Examination.

To the Edinburgh College your Memorialists decline to make any allusion beyond what may be contained in the previous communication which they have had the honour of laying before you. That Establishment is the property of an individual, who is teacher and proprietor of the School; and, being so, your Memorialists humbly request to be informed what right it can confer privileging a private person to petition for public grants?

Having endeavoured to point out the different parties petitioning against the present Charter granted to the veterinary profession, your Memorialists respectfully entreat you to contrast them.

The Council of the Royal College of Veterinary Surgeons is a public body; the Members are elected; their meetings are open, and their proceedings are reported. They have the support of a profession to whom they are responsible for their conduct. Their offices are honorary, and they have no individual interests to promote, or any pecuniary advantages to advocate, beyond such as may by them be shared in common with the profession of which they constitute a part.

The Professors at the Royal Veterinary College are appointed, and hold their offices removed from inspection or control. They have their gains to instigate them, and their claims to superiority of station to defend. They plead for no party but themselves, and they advocate no cause which the profession approves. Their actions are irresponsible, and their conduct is subjected to no revision. Their services are paid, and they have personal motives for continuing the agitation they have commenced.

That agitation has been by the Professors maintained without regard to honour or respect to truth. Slander has been unscrupulously indulged in; and after it had been refuted, the Professors were not ashamed to repeat it. Vexatious opposition has been on all occasions displayed. They have confused the deliberations of the Council, and interrupted the business of the General Meetings of the Body Corporate. They have made no effort to test the efficacy of the existing Charter, or sought to discover how far it might be worked for the advantage of the veterinary profession and for the benefit of the public. From them, your Memorialists have heard only of themselves.

Your Memorialists can perceive nothing in the conduct of the Professors which merits approbation, but much which every honourable mind must condemn. The Professors have been and are Members of the Council of the Royal College of Veterinary Surgeons. They took part in framing the Bye-Laws applying to the pupils; such laws were therefore known to the Professors. One of those regulations ordained that candidates for diplomas after the year 1847 should have served an apprenticeship of three years. The Pro-

fessors, however, have accepted pupils, disregarding of this law, promising the gentlemen who paid to enter the College that they should be admitted into the profession after two years' attendance. Before the present time arrived, the Professors hoped to have obtained a new Charter; but, failing in that expectation, they are now employed in constituting a Board of Examination, which, it is asserted, will issue unprofessional diplomas.

Such diplomas would be in every sense obnoxious: signed by persons selected by the Professors, they will represent only the opinions of the Professors concerning their own system of instruction. Granted by a Board appointed by individuals, such diplomas may be given to whomsoever those individuals think proper, and therefore will be neither certificates nor proofs of the fitness of the pupil to practise. Instruments of such a nature are open to every species of abuse; and, being likely to be confounded with the diploma issued by the Royal College of Veterinary Surgeons, are calculated to create a confusion, and keep alive an opposition of interests, injurious to the advancement of sciences and prejudicial to the welfare of the public.

The position which the Professors occupy is irreconcilable with any notion of propriety or idea of honour: it is such as should unfit them to be petitioners for any public trust. To the prayer which obtained the present Charter, the names of the Professors were, by their particular requests, appended: to the Petition which now begs the Charter should be revoked, the names of the Professors again are attached. At one time they ask for, and, getting what they desire, they cry against. They have been elected Members of the Council of the Royal College of Veterinary Surgeons: they retain such offices to act for the profession, but against the profession, whose trust they have accepted, the Professors see proper to exert their influence. Members of the Council of the Royal College of Veterinary Surgeons, *they are petitioners against the Council of the Royal College of Veterinary Surgeons*: their complaint, therefore, is against their own acts. They seek a Charter; but, asking to be invested with authority, they are studying to bring into contempt the power which a Charter can bestow. They beg for that which they display no disposition to respect: they oppose the expressed pleasure of the Crown, even while they entreat the Throne to grant them extraordinary privileges. As Members of the Board of Examiners, which existed previous to the grant of the present Charter, they resigned their offices as Examiners when the Charter was made known. They would now reconstruct the Board, which, by their consent, was dispersed. Factionous, vacillating, and contradictory, their conduct appears most strange. In one petition they complain that appren-

ticeship is made a necessary qualification towards the obtainment of a diploma. In the draft of a proposed new Charter, apprenticeship, however, is introduced as imperative towards the education of the practitioner. Once they lamented that they were not allowed to be examiners of their own pupils: now they ask only to retain that position the Council of the Royal College of Veterinary Surgeons have accorded them, of *ex-officio* Members of the Board of Examiners.

The principal reason advanced in support of the prayer for a new Charter is a fiction: it has no foundation in fact, and cannot be made to harmonize with truth. It is asserted that the Charter has taken the management of their affairs out of the hands of the Governors of the Royal Veterinary College or School, and exercises uncontrolled power over the said School. The assertion is utterly false. Your Memorialists ask that the statement be inquired into, and demand that it be supported by evidence.

The proposal to institute a Veterinary Board, as sought in the new Charter, is, in the opinion of your Memorialists, a ridiculous and weak invention, designed only to elevate the Professors, placing them over the other members of the profession, to whom they are by no means superior in ability. Such Veterinary Board, if attempted, could never be made of practical utility. One half of its members being resident in Scotland, and the other half located in England, no place of meeting for ordinary occasions could be found convenient for all the members to assemble at. The London and Edinburgh School having long been, and still being, opposed to one another, disputes would soon spring up. The Governors of the College, or School, act under the instruction of the London Professors. The Highland Agricultural Society give their confidence and patronage to the proprietor of the Edinburgh School. The interests which even now are at war would find support, and the result would soon be seen. The non-professional members would seek advice from the Professors; the Professors would become virtually the Board itself, and, that point secured, the quarrel, which has scarcely been disguised, would be openly displayed.

The proposed Veterinary Board, however, being intended to rule over the profession, ought to be possessed of the confidence of those who are to obey it: without such confidence no power could be enforced. The Professors have earned the dislike of their professional brethren, and where their influence predominates no reliance could be placed. Distrust would engender faction. The Council would, by the profession, be elected to oppose the Veterinary Board, which the proposed Charter contemplates they should obey. A state of things calculated to

disgust gentlemen, and cause them to retire, would speedily occasion the Veterinary Board to consist of the individuals who alone are anxious to possess the authority it is proposed to enjoy.

Taking, however, another view, and supposing no dissension to arise, the Professors being friendly, they nevertheless would form the only members having motives for activity. They would constitute a large party in a limited assembly: a majority would generally be at their command, since, if even all the members were present, one or two, gained over by specious arguments or unfounded statements, would decide a debate. Indeed, the object of the proposed new Charter is so plain, and the interest by which it was concocted so evident, that no one can mistake the persons under whose direction it was drawn up. It is, however, painful to see individuals aiming at degrading the profession they should respect for so mean a motive as personal advantage.

It is impossible to peruse the draft of the proposed new Charter without perceiving the intention is to promote the Professors above, and render them the dictators to, the veterinary profession. Every post and office which a charter could secure, is, by the proposed draft, given up to the Professors: not by right of talent, or on the ground of integrity, but simply because they are fortunate in place the Professors are to be Members of the Council, Members of the Examination Committee, and Members of the Veterinary Board. Other members of the Council are to be elected to that office. The Professors, are to take their seats on the plea of superiority. The President, Vice-Presidents, or members of the Council, are to be subject to removal for misconduct or other reasonable cause. The Professors are to be permanent, and no iniquity is to expose them to expulsion. The Professors are to vote at the Council, and at the Veterinary Board they are to vote again upon the acts of the Council. The Professors, as Members of Council, are to act for the veterinary profession; as Members of the Veterinary Board, they are to pass motions which shall be binding and conclusive on all the members of the veterinary profession.

The proposed new Charter is a barefaced attempt to establish an unexampled tyranny. There is neither precedent nor excuse for the constitution of such a power as that proposed to be established under the title of the Veterinary Board. No cause is shewn why it should be created; no security is offered that its power will not be abused. Uncontrolled in its acts, unlimited in its authority, and irresponsible in its conduct, the notion of such a power is opposed to every idea of government under which your Memorialists have been reared.

Against the establishment of a close and arbitrary power, to which a whole profession are to be made subservient, your Memo-

rialists most respectfully, but at the same time with the utmost energy, solemnly protest. In the name of justice on the part of the veterinary profession, they humbly submit to you their determination to resist it.

Before it was openly attempted to create an inquisitorial assembly which was to deprive a body of meritorious individuals of freedom of action, take from them all liberty of management over their own affairs, and reduce an honourable profession to a state of moral and actual bondage, some case of flagrant wrong, calling for the interference of the State, ought to have been established. None, however, has been made out. No accusation that could be maintained has been brought forward. The complaint is selfish, and the demand founded upon it preposterous. Nothing has been adduced warranting the destruction of existing rights, or sanctioning the revocation of an established Charter.

Your Memorialists do not believe that you, Honourable Sir, seriously entertain the proposal which you have been petitioned to recommend to the approval of the Crown. They will not credit that any member of the British Government, much less a gentleman honourably distinguished by the liberality of his opinion, could be induced to propose to Her Majesty the creation of an unenglish, unheard of, and unnecessary despotism.

Your Memorialists, relying confidently on the high sense of justice which nobly characterizes the British ministry, humbly submit to you that the present Charter was by the Veterinary Profession obtained at no inconsiderable expense. That charge the members of the veterinary profession have voluntarily liquidated.

Your Memorialists boast not of their wealth. They are members of a profession poorly remunerated, but anxious to excel. The cost of the present Charter was to your Memorialists a heavy responsibility; but it has been honourably and cheerfully discharged: neither is the Royal College of Veterinary Surgeons involved. The Council is steadily progressing. Their existence, however, is of but recent date. They are young in the exercise of duty, new to the cares of office, and have a profession to organize. Their situation is one worthy of consideration. They do not plead for favour — they ask only for justice; and beg, that, while they are guilty of no wrong, they may be allowed to deliberate undisturbed. They pray that, acting under the sanction of Her Majesty, they may be protected from the selfish annoyance of persons who are greedy of distinction, and hungry after the fees of office.

Your Memorialists complain that, since the establishment of the Royal College of Veterinary Surgeons, the Council has been con-

stantly subjected to the factious opposition of the Professors. Although time has not yet been allowed to judge finally how the Charter may work for the benefit of veterinary science, yet, up to the present period, under the direction of your Memorialists, it has given more satisfaction than could have been reasonably anticipated. It has done this, notwithstanding the interruption to which it has been exposed: that interruption, your Memorialists confess, has in a great measure crippled their actions. When they ought to have been engaged in consolidating their measures and considering the requirements of the body over which they preside, they have been distracted by boisterous agitation, forced to answer groundless accusation, and obliged to study to defend the rights which, entrusted to their charge, are unscrupulously attacked.

Your Memorialists, depending upon your approved and known love of equity, trust their case with confidence, Honourable Sir, in your hands. All that they have stated they are ready to prove; whatever they have done they are prepared to justify: they seek inquiry—they beg that the conduct and the assertions of their opponents be investigated—they entreat that a fair, full, and thorough examination of every circumstance be entered into. They respectfully solicit that the whole case may be sifted, in order that Her Majesty may be informed whether your Memorialists have violated the trust confided in them by the existing Charter, and whether the Governors of the Royal Veterinary College have fulfilled the intent of their foundation, or taken care to ensure the proper conduct of the School over which they preside.

Signed, on behalf of the Council,

THOMAS TURNER, *President.*

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, M.R.C.S. and V.S.

NEUROTOMY.

[Continued from page 184.]

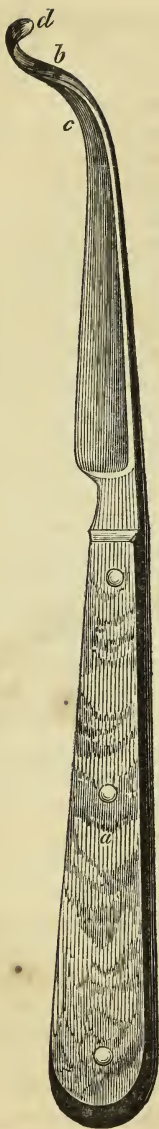
IMPROVEMENTS IN NEUROTOMY, since its first introduction, have been suggested, and some of them have turned out of merit enough to be carried into practice. The chief objects in view in the performance of such an operation are expertness and neatness.

While no cutting or meddling should be spared which can anywise conduce to the efficiency of the operation, it is at all times an object, and one deserving consideration, to leave as little wound or blemish as possible consequent on it. This consideration has prompted the substitution for the ordinary operation of what may be called

SUBCUTANEOUS NEUROTOMY; the operation surgeons are in the habit of resorting to, when nerves are to be divided for the relief of *tic douloureux*, or other painful affections; a long, straight, narrow, sharp-pointed bistoury being the instrument commonly used for the purpose. That a similar operation admits of being introduced—nay, has been successfully practised—in veterinary surgery is not to be denied. In the first place, however, it must be remembered that it is in those situations only in which nerves run unaccompanied by arteries, or in which a nerve runs at some interval of distance from an artery, that such an operation becomes practicable; and, in the second place, it must be borne in mind that nerves simply cut in two in a little time after unite again, and then the lameness, of course, may be expected to return; it not being practicable to excise any portion through such an opening as a bistoury makes. So that, in point of fact, unless for any time-serving or sinister purpose, such as the palming of a horse off for sale that has been lame and will become lame again, as a sound horse, hardly any end is answered in a case of lameness by the operation of simple division of a nerve. It is different, however, in such a case as tetanus, or in any case, in fact, in which the simple requirement is the immediate abstraction of pain or sensibility: the veterinary surgeon then, finding himself placed in the same position as the surgeon, may, if practicable, have recourse to the same method of operating.

All that admits of being done, in the ordinary mode of operating, by way of expediting the healing of the wound, and lessening the chance of blemish, is making the incision as clean as possible, and clean down upon the nerve at once, so as to render subsequent dissection unnecessary; and at the same time to be careful to make the wound no larger than is absolutely required for the excision of sufficient length of nervous cord. With a convenient instrument, it is practicable to seize and divide the exposed nerve through a smaller opening than when a ligature has first to be passed underneath it; and we have two instruments in particular which answer this purpose extremely well. One is the invention of

MR. ERNES, VETERINARY SURGEON, DOCKHEAD. It is in the form—as will be seen in the annexed woodcut—of a straight sharp-edged bistoury, to the pointed part of the blade of which is



given a sort of hooked curve (*c b d*), after the fashion of the first turn of a corkscrew; the intention being to pass the point of the blade (*d*), which is rounded off for that purpose, underneath the nerve, and so lodge it upon the bend (*b*) of the instrument, which is made flat and smooth to receive it, and admit of sufficient force being used to raise the nerve out of its bed, without chance of injuring it. This done, and the nerve examined and identified, one semi-rotation to the right of the handle of the instrument (*a*) on its axis will transfer the nerve from off the bend to upon the cutting part of the blade (*c*), whereupon any struggle the animal may make at the moment, or any force used at the time by the hand of the operator, effects its instantaneous division.

The other instrument, though of totally different construction, having similar objects, is the invention of

MR. GOWING, VETERINARY SURGEON, CAMDEN TOWN. As will be seen by the cut representative of it (in p. 253), this instrument resembles a pair of curved scissors, one blade of which (*a*) is made with a mortise through it () of sufficient length to completely receive within it the other, or cutting blade (*b*); the instrument admitting of thus being shut up, and then intended to answer simply the purpose of a *tenaculum*, to be passed underneath the nerve, and so raise it out of its bed for examination and identification. This done, and the operator satisfied he has hooked the nerve, and not either the *plantar artery* or the *ligament of the pad*, he gently permits the nerve to slide sufficiently forward upon the blade *a* to enable him to open the cutting blade (*b*),

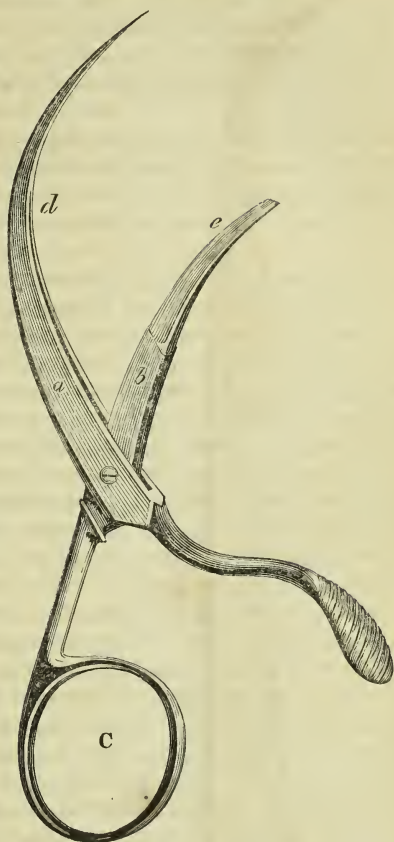
which now is ready, the moment the nerve slides back again upon the mortised shaft of the blade *a*, at the pleasure of the operator to be closed, and in being so, after the manner of a pair

of scissors, to effect the division of the nerve. Only the upper half of the blade *b*, as will be seen by the woodcut, is provided with a cutting edge.

Between instruments of such different construction, although intended to answer similar purposes, there is no making any comparison. Nor is it needful for us to do so. All that we shall say, in passing any opinion on their merits, is, that in their way both exhibit more than ordinary ingenuity in their invention, and that the neurotomet who takes care to provide himself with one or both of them, will find himself at the moment of operating in the possession of an aid which will much simplify and shorten his undertaking.

THE UNION OF THE DIVIDED NERVES takes place forthwith, provided those nerves are simply cut in two; sensation—and with it lameness—returning in about a month or six weeks: but if a portion of nerve be excised, *immediate* union is thereby prevented.

In a series of experiments made on animals by Swan* to set the question of union of nerve at rest, he found that when a portion of nerve is removed the restorative process is set up the same way as when there has been merely division of a nerve; and that this was, that the extremities of the divided nerve, particularly the superior one, became thicker and more vascular: coagulable lymph, having the appearance of albumen, being poured out, and in a short space of time permeated by bloodvessels: then both ends of the effused lymph form an union, and anastomosing vessels shoot through it. Gradually, this intermediate



* On the Local Diseases of Nerves.

substance acquires a firmer texture; the number of bloodvessels in it in the course of time diminish—it shrinks in substance as in cicatrization, and the separated extremities of the divided nerve approach nearer and nearer each other. But Swan found it difficult to determine at what period this intervening new material was capable of carrying on the nervous function.

If we examine the nerves of the limbs of horses any length of time after they have been operated on in the usual manner, we find oblong bulbous swellings occupying the intervals from which portions of nerve have been excised; and these tumours we observe to be larger above than below, measuring three or four times the bulk of the original nervous chords. This consequent enlargement it is which makes it so objectionable to perform neurotomy on the side of the fetlock, where the horse, should he be disposed to hit his legs, would be certain almost to strike the bulbous nerves, and when he had done so, for the moment render himself dead lame from the exquisite pain the blow occasioned him. Between this nervous tumour and the cellular tissue by which it is surrounded, firm and dense adhesions exist every where; so that it requires some dissection with a sharp knife to raise the tumour out of its bed. Cut into, its substance is found to be pearl-white, solid, and firm, more like cartilage, in fact, than nervous substance.

OF THE REGENERATION OF NERVOUS MATTER our chief knowledge is with respect to the regeneration of the tubular fibres. “Many years ago, our countryman, Doctor Haighton, in making experiments to determine the function of the *vagus* nerve, shewed, that when a nerve is simply divided, without taking away any portion of it, union would take place, and the nerve resume its proper office. If a considerable piece were excised, so as to leave much interval between the cut ends, there would be union after the lapse of some time, but not by true nervous fibrous, nor in such a way as to restore the action of the nerve. It appears, however, from recent observations, of which those of Schwann, Steinreich, and Nasse are the most interesting, that true nervous fibres may be developed in this uniting substance, but apparently in smaller numbers than in the nerve itself. The proof of the regeneration of the true nerve-fibres depends upon the restoration of the nerve’s function, and the demonstration of the presence of proper nerve-tubes by microscopical examination. Perfect restoration of the action of the nerve does not generally take place, owing, most probably, to the fact that the central and peripheral portions of the same fibres do not always meet again. The central portion of a motor fibre might unite with the peripheral segment of a sensitive one, and thus the action of

each would be neutralized."—*Todd and Bowman's Physiological Anatomy.*

RETURN OF SENSATION.—So far as restoration of function in a nerve can be considered as proof of union of its divided ends, the notable experiment, so impressively set forth by our late Professor Coleman in his "Lectures," concerning the division of the *par vagum* in horses, is conclusive. If the nerves on both sides of the neck be divided at the same time, or within a short interval of one another, death becomes consecutive on the division of the last; whereas, if an interval of three weeks be allowed between the operations, the animal survives.

Neurotomy, as performed for lameness, proves the same thing in the case of excision of the substance of the nerve; the difference being, that while after simple division the nerve takes but a month or two to have its union and function restored, after excision the time required for regeneration and restoration of function becomes lengthened in some sort of ratio to the quantity of nerve excised. MEYER, who instituted some experiments to illustrate this, found that when he excised one line in breadth of nerve, the reproduction occupied three weeks; and when two lines' breadth were cut out, two months. Mr. Sewell found, in cases of entire section of the nerves of the limbs of horses, that sensation returned in about a couple of months; but that when a portion of nerve was excised, the period of restoration and return of feeling could by no means be calculated with any certainty. In a horse I neurotomized many years ago, belonging to the Artillery, sensation and lameness returned in two years, and he was in consequence sold, unfit for further service. But, in a horse of my own, on which I operated for navicularthritic lameness (whose case is mentioned in vol. xx), and thereby rendered sound, after having ridden him myself for upwards of two years, and then parted with him, sensation had not re-appeared. So far as the return of *lameness* is the question, one of the most extraordinary cases we have on record is that (Case I) of the late Mr. Castley (referred to in vol. xx), wherein the horse neurotomized returned to his duty, as a troop-horse, a month after the operation, and continued to do his duty for *eight years* afterwards; and even at the expiration of that length of time was not sold on account of any failing in his *ci-devant* lame limb, "but for old age." Although lameness had not returned, whether *sensation* had or had not we are not informed. The two conditions, although closely allied, and for the most part dependent, are not altogether so. As was stated before, cases, no doubt, arise in which changes of such a nature occur, either in the structure or function of the parts affected with the disease

causing the lameness, as in time work the cure of that lameness, or, in other words, enable the animal to perform actions without pain, which in former times occasioned him more or less pain, and consequent lameness. Cases of this description, we repeat, may and do occur; though we are by no means sanguine enough of such results to hold out hopes of the kind to our employers.

NEUROTOMY CONFINED TO ONE LEG holds out better prospects of success than when *both* (fore) feet are robbed of their nervous communication. We had occasion, at the commencement of this subject, to state that there was, under the more favourable circumstances, some alteration occasioned by neurotomy in the action, either sensible to the by-stander or else to the rider. This, in one limb, might prove so slight as hardly to be perceived, though, existing in both, the alteration might turn out for riding any thing but what was pleasant. Added to which, in two legs, of course, there is more risk of failure from the operation than in one, and there is double risk afterwards, supposing both operations—or rather all four operations—turn out completely satisfactory. A reference to those cases of neurotomy in which success has proved most signal and lasting will shew that, for the most part, they have been lamenesses of *one* leg. Indeed, so formidable to our French veterinary brethren did neurotomy in both fore legs appear, that they held it to be unwarrantable, nay, impracticable and dangerous. This, however, our own experience contradicts. Still, that neurotometist is in the happiest position who is called on to operate on one leg alone. Nor need he be under the apprehension, which might enter his mind, that because neurotomy has restored one foot, the animal will fail in the opposite one. If he does fail after this manner, it will be from a translation of navicularthrititis.

SEQUELÆ OF NEUROTOMY. Notwithstanding the precaution has been given before, it is one that may be given again, indeed can hardly be repeated too often, viz. that every injury or sign of injury to a foot or leg deprived of sensation, requires double care and attention on the part of the person tending on such horse, seeing that the animal, feeling no pain, will afford no indication of annoyance or suffering himself. The disregard of this plain and obvious injunction it is that proves the fruitful source of mischief in various forms, arising out of neurotomy certainly, but as certainly not fairly ascribable to neurotomy. A simple bruise or tread upon a leg or foot devoid of sensation may breed inflammation and festering of the part, and that may end in caries or quittor, or in something worse, and all owing either to neglect or wilful perseverance in wrong, after the mischief has declared itself.

Of such accidents, or rather ill consequences of accidents, it would be useless to speak further; and therefore I shall dismiss these avoidable grievances to examine

THE OTHER CLASS OF EVILS ARISING OUT OF NEUROTOMY, such as proceed from improper use of the horse after the operation, or at least of such use of him as under the circumstances of his special case he is, and ought, probably, to have been known to be, not in a condition to endure. To suppose that every foot deprived of sensation upon which a horse, in consequence, goes sound, is to bear any kind or amount of work the owner of the horse chooses to impose upon it, is running in the face of all reason. It is true, horses have hunted, have performed cavalry exercise, have carried their riders through long and fast journeys on the road; have done extraordinary work in harness: it is equally true, however, that horses which have been neurotomized have failed from the moment they have been put to any hard work, or unusual effort, such having brought on inflammation and suppuration of the feet, followed by casting of the hooves, fracture of the navicular bone, rupture of the long flexor tendon at its place of insertion, &c. These are evils which may not at all times be avoided; at the same time, we have no right to run in the very face of them by putting a neurotomized horse to severe or trying work, whose foot or feet, though he go sound, are not, from all we can judge from appearances and circumstances, in a condition to bear it.

CAN A HORSE THAT HAS BEEN SUBJECTED TO NEUROTOMY BE CALLED SOUND?—"Most certainly, no!" replies our late honoured colleague, Mr. Youatt; and he pertinently adds, "There is altered, impaired structure; impaired action, and a possibility of the return of lameness at some indefinite period. Let the horse be ever so free from lameness, he has been disabled—he possibly is diseased now; but the pain which usually accompanies the disease being removed, there are no means by which it (the presumed or supposed disease) can be indicated." So far so good. But let us put the case in a somewhat different light: it may be a strained light, but still the case has happened, and may again happen. Supposing a horse restored to soundness through neurotomy; and supposing he continues to go sound for several years—nay, for life, afterwards; and supposing satisfactory proof to be given, that in the said horse's originally lame and senseless foot the power of feeling can be proved to have returned; and to this add, that, after the most searching examination, no sign of existing disease is disclosed. Is such a horse to be regarded, in the eye of law or equity, as sound or unsound? We leave the question for the "judges," as well of horses as of law, to determine.

THE VETERINARY PROFESSION.

By EDWARD MAYHEW, M.R.C.V.S. *Spring-st., Sussex Gardens.*

To the Editor of "The Veterinarian."

Sir,—HOWEVER much I may lament the necessity, the circumstances which surround us leave no choice. Once more am I obliged to be silent upon those subjects which are of general interest and scientific importance, that I may again speak to the profession of matters which the Professors have made notorious. How long the mercenary motives and arrogant pretensions of three or four individuals are to distract the minds and retard the usefulness of the veterinary body it is hard to conjecture. The duration of the evil seems to be limited only by the patience of the minister for the Home Department, and some persons are very tolerant of others' wrongs. So long, however, as the annoyance is permitted to exist, even for such a period must those who have feelings to express make their voices heard. I have no pride in the dispute, and no desire to keep alive the bitterness of sentiment to which it has given rise. Sincerely do I wish the affair were ended. Still, conscious that the right is with our cause, and convinced that justice is on our side, there is now no disposition to retreat. The time when compromise was possible has passed. The battle must be fought: let those who have provoked the strife abide the issue.

No man must allow his energies to be damped by words. Promises are easily made, and more easily broken. Declarations of what is meant should now be received with caution. Facts have been made known, and these alone ought to be regarded. The act should shew the motive: if the one is upright, the other cannot be crooked. To actions, therefore, we have now to look: it is deeds we have to deal with. By these let the designs be interpreted; and what do they exhibit when the intentions of the Professors are deduced from that which they have attempted in the draft of a proposed new charter?

The preamble to that document sets forth the long-felt grievance that veterinary practitioners do not enjoy those privileges and exceptions which the members of the medical profession are entitled to. The statement is not to be denied. So far as it may contain a mere acknowledgment of a notorious fact, it is worth something: beyond that, however, it is of no value. The question is not now for the first time proposed, nor is the sympathy it implies to be depended upon. It is an empty plea put forth to catch the thoughtless and impose upon the weak. The subject did not demand the advocacy of the petitioners in order to attract notice. It has been for some time before the Council. A committee has been appointed

to take those measures necessary for bringing the matter before the legislature: as members of Council the Professors ought to have known this. They should have been aware that the Committee referred to waited only until the registration list was perfected to pursue their labours. They ought not to require to be told that the Council have been and are desirous of getting introduced into Parliament a bill to relieve the veterinary profession from the liabilities to which they are injuriously exposed. The plan for accomplishing this object has been prepared; and till it had been tried, and had failed, the voluntary assumption of the leadership was not called for. That post was filled—the ground was occupied: and the gratuitous appearance of the Professors will not expedite the victory. Interference, however, may create confusion—two parties struggling to gain one end may cause impediment. Such a result might not be objectionable to those who, having private purposes to serve, wished only to raise a party, and to take the lead.

Now, how far the generosity of the plea was genuine may be conjectured from the clauses which the proposed new charter contains. Whether that instrument was concocted to advance our science or enrich our body, let those who have perused it say. Let any one who has read its clauses declare if, supposing it possible the provisions they contain could be authorized, the veterinary profession would be benefitted.

The forty-eighth clause directs, that any person who shall possess a diploma from any of the universities, or from any veterinary school,—no matter where such school may be—in any colony, or in foreign parts, or from any medical college or society, shall become a member of the veterinary profession after he has attended the lectures of one session.

It is not my wish to write one word which might savour of disrespect for the medical profession. To the labours of that noble and learned body I acknowledge myself indebted. Two-thirds of my little library is composed of medical works. I consult their writings when in difficulty, and I rarely do so without being assisted by the information they afford. I am proud of the debt I owe, and wish not to deny it: at the same time I must admit, that however close may be the principles, the practice of the two professions is widely separated. He who has learned to treat the human being has not therefore acquired the power to administer to the diseases of the lower animals. When the surgeon essays to cure his horse, the animal generally dies. This fact is so well known, that cow doctors and farriers even are aware of it. The study of human surgery seems rather to unfit than to prepare the mind for veterinary knowledge. Numerous are the instances of

gentlemen who have attempted to overcome the difficulties, but at present I cannot recollect an exception to the rule. Such being the case, and the fact being so established, I cannot comprehend the reason why the gentlemen who seem to be most disqualified should be required to attend the shorter period to their studies. I know much of the physiology of man applies to brutes. The anatomy of the one animal is not, perhaps, very different from that of those creatures which are immediately below him. The pathology is greatly similar, and the drugs employed in both cases are the same. Yet the habits are not alike—the developments are not parallel—the symptoms are adverse, and the doses are opposed. The principles are united; but in their application they are wide asunder. He who leaving one pursuit would embrace the other, may have learned much; but he also has acquired habits and modes of thought which he will find it almost impossible to discard. He may enter on the task theoretically prepared to master it, but he soon discovers that the preparation gives him no advantage. Disappointed of the assistance which the answers to his inquiries afforded, and deprived of those reliances on which he has been tutored to depend, he soon becomes confused, and abandons his new profession, not because he could not learn, but because he was unable to forget.

Could it be possible to enrol among the veterinary profession the names of gentlemen who by their writings contribute so largely to its advancement, every member of our body would rejoice. Of that, however, there is little hope: it would be folly to expect it. The respectable desire to assist; but they are not eager to be classed amongst us. They are our superiors; and, as such, I feel no shame to acknowledge them. On scientific grounds we labour to be equal; but in social position we are inferior. To offer a physician worthy of the name a veterinary diploma is ridiculous—to ask a surgeon to resign the lancet for the drawing-knife, is obviously a folly. Apothecaries would not find it profitable to quit the chamber for the stable. As a class we are poorly estimated, and even more lowly paid. We have neither wealth nor dignity to tempt the prudent to come amongst us: there may, perhaps, be some few who might desire any change. In every profession there are to be found those who by misfortune or imprudence have been rendered reckless. The cause may be regretted, but the condition it induces is not to be admired. Such might find an easy entrance to the veterinary art a welcome refuge; but against their admission I protest. Humble as we are, we have yet a character to maintain. I protest against our profession being made the refuge of the desperate or debased. Low as we are we have yet some pride. I protest against our profession being made a

cheap and ready resort for every man who, having wearied out his friends and ruined his expectations, may manage to scrape together twenty guineas and a winter's board.

The Professors, probably, might see a benefit in the entrance fee ; and, not being themselves in practice, the consequences of such additions to our number might not alarm them. They thrive by teaching, and pupils are all they want. Let the class be large, and what takes place beyond the College walls will not affect them. Possibly they may think the general degradation makes more conspicuous their respectability. The contrast might be gratifying ; but I trust it never will be seen. It might, however, soon be witnessed, could the proposed new charter be established. The foregoing clause was bad enough ; but the fiftieth far exceeds it. The trap is here so thinly baited, that the intent is seen. The object evidently is to increase the school. Diplomas, it is proposed, should be in the master's giving ; and the way to gain them is made very smooth. All obstacles are removed, and every class or state has its advantage. It is true, apprenticeship is mentioned ; but that difficulty is tenderly considered. We know some agriculturists imagine, that he who has not been used to cattle may be of little service on a farm. There may be a few who think a veterinary surgeon should know how to approach a beast without alarming it, or being himself afraid. Men have said the students raw from Saint Pancras have killed the cow they were called in to cure. Such accusations have been heard ; and, therefore, to overcome the prejudice, this clause provides for due apprenticeship. Apprenticed the candidate for a diploma must have been, for so the proposed new Charter stringently insists. The only point is, with whom he shall have served ? What can that matter ? Those who think apprenticeship imperative towards the qualification of the practitioner shall be indulged. Let them take the word, and ask no more ; for if they inquire further they will not be pleased. Three years spent with a surgeon, an apothecary, a druggist, or a farrier, will satisfy the College. The country doctor of some distant village, who takes a boy to eke his income out, and finds that idleness renders the youngster wild, can cancel his indentures ; and when the lad is ruined, turn him over to Saint Pancras for a Vet. How much knowledge most youths gain by such apprenticeships the Report of the House of Commons Select Committee may declare. The farmer, possibly, would not find the future race of veterinary surgeons much improved ; and the agricultural interests might not be well advanced by the aid of those who were incompetent to mix a draught or make a pill. The practitioners' cast off would be bad indeed ; and yet the chemists' torment would be worse. The one might have ridden to

a case, and on his journey have looked upon a cow. Neither horse nor ox to him might be quite strange. The other, however, coming from the academy to the shop, throwing away his books to take the pestle up, and never leaving the counter save when there was physic to take out, would be well qualified to pass quickly through the veterinary school. It is true, he in his master's place would mix up drinks and pack up balls. He would in the window see a plaster horse; and occasionally he would compound a strange specific for a cat. Such education, in the Professors' eyes, would fit the lad at once to take the lead in the shed, the stable, or the forge. Those who concocted the proposed new Charter thought the druggist's 'prentice equal to the veterinary surgeon's pupil, and offer to certify the fact. They ask the ministry to charter them to propagate so gross a falsehood. They have obtained the sanction of the Highland and Agricultural Society to the enormity. The governors of the Royal Veterinary College back up the outrage; and, to crown the whole, the monstrous untruth is officially presented to the Throne.

Common sense revolts at the hardihood which dared advance this infamous proposal; but, if possible, even that is surpassed by what succeeds, if every country chemist is to write Member of the Royal College of Veterinary Surgeons above his door, and in his person to unite trade and profession, every fellow who lingers about a mews or travels to cut pigs (either of which might be made to constitute the veterinary art) is to take apprentices, and to send them up as candidates for our diplomas. The would-be Charter seeks the recognition of a class, yet contains a clause acknowledging an order which its intent and purpose is to repudiate. If the pupil is to be accepted, why is not the teacher to be embraced? When the farrier's 'prentice is admitted, why should the farrier be repulsed? What the one could claim for learning much, the other might demand for knowing all.

Such are but two of the contemplated clauses in the proposed draft of a new charter. The profession will do well to consider them. The object is too plain to be mistaken. The design lies so openly upon the surface, that no man can fail to see it. The Professors want the pupils, from whom they get their incomes, and for all else they care not. Let the fees be numerous, and they can smile at consequences, which, however fatal to the profession on whose merits they urge their prayer, will have filled the pockets of the men who, within the College walls, are not likely to be affected by them. Treachery more flagrant, or selfishness more abhorrent, was never displayed. It should be published and made known. The veterinary practitioner should think well of the men who have presumed to make farriers his equals, and chemists his

competitors The members of our profession ought not to lightly view the individuals who have proposed to swamp their interests by throwing open the door to every scapegrace, and welcoming the advent of every vagabond who wants a pretence to cover his dishonesty.

Agriculturists should not overlook the anxiety displayed by those with whom some of them act in concert. While their request to have apprenticeship instituted is acceded to, they ought to mark the manner in which the principle has been evaded. Remembering the losses they have sustained, they should observe the care taken for their future security. The honour of the transaction, and the integrity of the dealing, should be investigated. The property of a class is interested, the advancement of science is involved. A large and important principle must not be allowed to be made subservient to individual gain.

Against the proposed new Charter, all who are interested in the progress of the veterinary art, are bound to move. It is not a narrow squabble which it concerns. The question embraces more than I dare here point out. Let none be idle. The time has passed when a merely passive position was commendable. If the proposed grant could receive the royal signature, the aristocracy and wealth of England would speedily find reason to petition that it might be revoked.

I have the honour to be, Sir,

Your obedient servant,

EDWARD MAYHEW.

THE VETERINARY PROFESSION.

By THOMAS WRIGHT, *M.R.C.V.S., Brighton.*

To the Editor of "The Veterinarian."

Sir,—A LONG time has now elapsed since any contribution from my pen appeared in THE VETERINARIAN: still I have from time to time, with feelings of the greatest satisfaction not altogether unmingled with anxiety, perused the information contained in its pages; and I should feel that I failed in my duty towards the gentlemen with whom is entrusted the welfare of our Charter, if I did not, in return for the energetic exertions they have made and are daily making to protect our rights from violation, express to them my most sincere thanks, and congratulate them most cordially

upon the success which has hitherto attended their well-directed efforts. Such a course as the one so rigorously pursued by them ought and must ultimately effect its object. Failure is impossible; and future generations will with pride refer to the members of that Council who, in the time of faction and trouble, maintained their Charter pure and inviolate, that it might descend to their inheritors as a boon worthy of acceptance and of general usefulness instead of being, as it otherwise must be, an empty, worthless, appendage.

The profession are most seriously alive to the occurrences past and passing; but their confidence is so implicit in their Council, that they are content to rely entirely upon their vigilance and integrity. The time, however, has now arrived, says Mr. Mayhew, when "If that the Charter have the support of the profession, the fact must be demonstrated;" and it is with a full concurrence in this assertion that I now address you, fearing that I may not be at liberty to attend the general meeting.

Upon taking a retrospective view of all that has appeared, and considering all the probable advantages and disadvantages which would arise in the event of the present veterinary schools withdrawing themselves from the corporate body, or if that they, by illegal acts, should place themselves beyond the pale of the existing Charter, I am decided in the opinion that such an event, instead of being in any way feared, ought rather to be rejoiced at, if that a total reform does not take place in their operations. And I consider, moreover, the veterinary profession to be forcing a derogation upon their Council if they do not come forward and take upon themselves the entire responsibility of such a change, and empower their Council to demand an instant cessation of hostilities, or at once proceed to the putting into execution such plans as shall for ever prevent the possible recurrence of such exceedingly disagreeable misunderstandings.

Why may not the Royal College of Veterinary Surgeons have a school of its own? What are the objections, and wherefore are we to be beholden to parties out of the profession for the use of a school for the instruction of those anxious to become members of the corporate body? The St. Pancras School is certainly an edifice not calculated either from its external appearance or internal management, to reflect any very great degree of credit on the profession at large. Besides, the progressive spirit of the times calls loudly for an institution better in every respect than either of those now in existence. A new school, of which every regularly qualified veterinary surgeon would be eligible to become a member and have a voice in the general management of its affairs, would at once receive the decided support of the whole profession, who, having an interest in its welfare, would be certain to employ all

the various means at their command to secure its advancement; and thus would be achieved a signal victory over the grievous annoyances to which we are now continually subjected.

The schools, now big with self-importance, would then receive the reward they appear so long to have studied to deserve. A few years would find them fallen beneath the significance of a body determined in the worthy ambition of raising themselves to that elevated position whence empiricism and all its attendants are viewed with ridicule, contempt, and disgust.

Your's very truly.

Horse Infirmary, Castle Street,
April 10th, 1848.

VETERINARY BOARDS OF EXAMINATION.

By Mr. W. WHITTLE.

To the Editor of "The Veterinarian."

Sir,—IN your last number there is an anonymous advertisement respecting the appointment of "certain Boards of Examination," and letters from Mr. Mayhew and Mr. Cherry on the same subject, with reference to which I beg to offer a few remarks, hoping you will insert them in your next publication.

I am one of the numerous individuals intending to present myself at the ensuing examination here, and, if successful in passing, shall obtain one of the "certificates or diplomas," which the advertisement states, "are not valid, and will not confer any of the rights, privileges, or immunities granted to the body politic and corporate," and will not "be any guarantee of the qualification of the person practising." Will you, Sir, be kind enough to inform others, and myself, who cannot attach any importance to these statements, what there is in the Charter which "renders certificates or diplomas not valid," when granted by other boards of examination than those for which it provides? Is there any thing in the Charter which prevents men who are not members of the body politic from practising the veterinary art, when they gain the confidence of the public? Having pursued the curriculum of study entitling me to appear before the Board of the Royal College of Veterinary Surgeons, if, for my own reasons, I prefer presenting myself before another examining body of superior efficiency and respectability, what is there in the Charter entitling any one to call in question my "qualification" as a practitioner of the veterinary

art. Perhaps, too, you will be kind enough to inform me, what really valuable "rights, privileges, or immunities," a member of the body politic will enjoy, of which I shall be deprived, provided my professional capabilities are considered by the public equal to his.

I am ignorant of the management of the institution to the abuses of which the greater part of Mr. Mayhew's letter refers; but I am convinced that, from the manner and circumstances under which his statements are made, they will but at best, and if correct, fall pointless on your readers. In speaking of the subject, and the Board of Examiners to which I am especially alluding, there are other remarks of his which more immediately concern me. His statement, that "no man of character could sit on such a board" had better have been withheld until he had seen of whom the board was to be composed. I can assure him that this gratuitous testimony to character will not apply to the Edinburgh Board, which consists of men to whom no one can possibly impute want of character or reputation, without being thoroughly ashamed of the existing Board of the Royal College of Veterinary Surgeons which examines at this school.

We have had enough of examiners of whom the remark would have been peculiarly appropriate, as alluding to men whose knowledge of the English language can scarcely render them intelligible to those they address, and whose only public appearances are as annual Examiners for the body politic. A candidate rejected by such a Board suffers little disgrace; a person possessing a diploma with such names attached, may become a member of the body politic and corporate, yet he cannot but consider that ten guineas spent on such a document is wasted, whilst there is a chance of obtaining another signed by men of known scientific reputation, before whom it is a true honour to pass a successful examination, and by whom it is a real disgrace to be rejected.

Mr. Mayhew says, that the assertion regarding the establishment of another Examining Board is a "puerile" threat—that the "idea is preposterous,"—and makes other vague and premature assertions in endeavouring to ridicule the probability of such a measure being carried out. It seems, however, that he is really "fearing the possibility of such an event," and admits that, when diplomas are granted by two different examining bodies, "the false and true paper will be confounded." So far, indeed, has this fear gone, that a model of the Crest of the Royal College has been prepared for the members of the Incorporation. But does it not occur to Mr. Mayhew, that if the diploma of the Royal College stand in need of any other than its own recommendation, it will surely be most humiliating for its possessors to be driven to the "puerile"

necessity of putting their trust in a graven image, even though it be that of a monster which "rears boldly up, firmly grasping the shield?"

Mr. Cherry's letter is but an echo of Mr. Mayhew's remarks regarding the subject alluded to. It were well had he adduced something new in support of the vague, and, as yet, unproved assertions which he so unaccountably reiterates nearly word for word, and which fail to convince the reader of any thing, except that he has nothing to say.

He asks, "what of instruction is to be meted out, what is to be the standard of knowledge to enable a candidate to appear before such a board, and possess himself of such a valueless document? It cannot be high, when, if rumour does not lie, one who is incapable of writing his own name may probably be a candidate." Here is nothing but hypothesis on Mr. Cherry's part, and, consequently, nothing tangible in the question he both puts and answers. I will endeavour to supply him with a reply of more general application than his own: it is this—There are students going before "such a board," who are entitled by apprenticeship and attendance at college to appear before the Examiners of the Royal College of Veterinary Surgeons. The instruction which has been "meted out" to them is what the Council has hitherto accepted as admitting to examination, and would, I doubt not, have gladly accepted again had we given the opportunity. There is less shame in a person probably being a candidate who is incapable of writing his own name, than in the Royal College of Veterinary Surgeons having Examiners who cannot write legibly, or spell anything like correctly the words and questions they employ, and which they cannot even articulate in intelligible English.

Mr. Cherry would oblige me if he would state what there is in the Charter, or in any existing law, which constitutes members of the incorporation alone eligible for army veterinary surgeons. Let him point out, by reference to specific laws and regulations, not by reiterating his own assertions, what there is to prevent the examination of any individual possessing the necessary attainments, or what there is to hinder his appointment if found professionally competent.

But by certain parties appointing a Board to examine their own pupils, it is asked—"Whether by such acts they do not place the schools beyond the pale of the Charter?" If the schools instruct those students who wish to become members of the body politic in the way and under the conditions specified by the Charter, what further have they to do with the Charter, or the Charter with them? If students wish to be educated, and never intend becoming members of the corporate body, must the schools deny

them admission? I apprehend the schools can do well enough without the Charter,—much better than the Charter can do without them. Where else than from the schools must the funds come from? for the Charter does not seem so highly prized as to call forth from the body politic that pecuniary aid of which the Council seems so much in need. Instead of being the much-vaunted boon, by conferring rights, privileges, and immunities, it seems to have disgusted the profession, from which, as could but be expected, the Council receives apathetic indifference in return.

With regard to the “Register” as a security to the Incorporation, it seems to me much of the same value as the graven image which is being set up. If the Registry is so valuable, how is it that, after some years’ existence as a corporate body, no public accredited list of members has been published by the Registrar General? The members of the profession must care little about the matter not to make that functionary aware of their existence and locality; or, if they have given him the required information, he must have been remiss in not publishing the list referred to.

In short, Sir, I believe, along with most others, that the profession has yet to be convinced of any value the Charter may possess in conferring rights, privileges, or immunities. The Public is the arbiter which will decide whether a man will fail or succeed in professional life. A man may go forth to the world a thoroughly able and scientific practitioner, without being a member of the Royal College of Veterinary Surgeons, and his claims for public support will not rest on the decision of that body. If he does not possess the needful scientific and practical qualifications, he will assuredly fail, although a member of the body politic and corporate; and not even their diploma, or registration, and much less their graven image, will render him any assistance.

I am, Mr. Editor,

Your most obedient humble servant.

George Street, Edinburgh,
17 April, 1848.

NEUROTOMY.

By J. G. WEBB.

To the Editor of “The Veterinarian.”

Sir,—HAVING had frequent opportunities of witnessing the effect of neurotomy on horses, the following results may not be unacceptable to some of your veterinary readers.

CASE I

Was a chestnut mare, sixteen hands high, possessing great muscular power, temperate with hounds, and very fast, well known to the Puckeridge Hunt. She fell lame in the navicular joint, for which she was blistered and fired without any beneficial result. She was then sold to a gentleman in town, who had the operation of neurotomy performed on both legs above the joint; after which she went sound, but with an apparent loss of speed.

CASE II.

A well-bred chestnut mare, fifteen hands high, who had been hunted in Surrey. She had navicular lameness. I operated on her under the joint, and excised about an inch of the plantar nerve: she went sound, but lost her pace, and was sold to go in harness.

CASE III.

A beautiful well-bred bay horse, sixteen hands high, well known with the Surrey hounds. He had a navicular lameness, was bled in the foot, blistered, and fired round the coronet.

I told the owner that he had performed an useless operation, and advised him to have the horse neurotomed; but to this he would not consent. After a long rest he appeared much better, and was then ridden with the hounds; when, on the first day, he became as lame as ever. A few days afterwards I bought him for a small sum, and divided the metacarpal nerve in the near fore leg, after which he went perfectly sound. I kept him two months as my hack about town. I then sold him to a dealer, telling him he had been neurotomed. He wished to see him perform; and, consequently, we had a spurt across the country for two miles, when I found he could neither go the pace nor in the style that he formerly did; and in one down-hill jump he brought his fore foot so far under him as to strike my stirrup; all which I conceived to be the consequence of the operation. I, however, sold him to the dealer, who afterwards sold him to a crack steeple-chase rider. He afterwards carried a lady with the Surrey hounds.

CASE IV.

A compact, strong, and clever horse with hounds, but navicularly lame. I was consulted by the owner, whom I told that the only cure would be the nerve operation, to which he consented.

I operated on the near fore leg above the joint. He afterwards went sound, but clambered in his gallop, and could not go his former pace. He was ultimately sold to hunt in Essex.

CASE V.

THE CHIEF, a steeple-chase horse. As regards the lameness of this horse, there were a variety of opinions. I was consulted, and stated it to be navicular. He was sent to me to be operated on. I excised a portion of the metacarpal nerve. He afterwards went sound—was put into training—ran second in the first steeple-chase in which he was engaged; and in the second, while contesting the race with another, to be first at the post, his hind foot unfortunately became fixed in the heel of the fore foot of the leg on which he had been operated, and he came down, tearing the flexor tendon to threads. He was in this condition destroyed.

As my mode of operation is different from that which is generally adopted, and as it may not be unworthy the consideration of practitioners, permit me to state it. Instead of making the incision *down* the leg, I make it *transversely*. The consequence of this is, if well performed, that the cicatrix can scarcely be detected: the hair growing over it, and completely covering it from above, renders it altogether imperceptible to the eye.

I am, Sir,

Your obedient servant.

April 15th, 1848.

*** Will Mr. Webb kindly inform us if he practises the *transverse* operation *below* as well as above the fetlock; and if he finds any difficulty in excising the nerve through it; and whether it occasions, afterwards, any protraction in the healing of the external wound?—ED. VET.

FALSE PRESENTATION IN A HEIFER, AND DIFFICULT PARTURITION.

By JOHN YOUNGHUSBAND, V.S. Greystoke.

Sir,—IN looking over some loose memoranda, I found the following case of false presentation and difficult parturition; and as the season is approaching when we may expect to meet with cases of the above description, I perhaps may be excused for narrating some of its particulars.

A friend and employer of mine, a Mr. Harper, residing in the neighbourhood, had out at winterage some cattle (not having sufficient forage at home to keep them) distant some three or four miles off. He occasionally went to visit them. On one of these visits he found a fine four-year-old heifer labouring under a state which clearly indicated that manual assistance would be now necessary; so he immediately retraced his steps, and called upon me for help. On my arriving at the patient's domicile, on a very cursory glance, I quite expected I should have some sharp work to do, seeing the head and neck had already protruded, and that to their full extent, and had become (either from the parts being exposed to the action of the atmosphere or from having been so long strangulated, or, perhaps, partly from both causes) quite livid, and were emitting a strong cadaverous odour. The head and neck being in this situation, and no fore feet appearing as in a natural presentation, to make any attempt to search for them in the tumefied state of the head and neck was next to impossible; and to offer to return the parts, as suggested by a looker-on, would have been worse than useless. So I went to work, and by a circular incision made quite round the neck, close behind the ears, divided the skin all round, dissected it as far backwards as I could, disarticulated the vertebræ, and separated the head and neck from the rest of the body. Placing the loose portion of skin over the divided end of the bone, I proceeded to push the part back into the uterus. My next step was to bring the fore feet and legs into a right position, which was also done without much difficulty. After having thus got the parts into a favourable position, I fixed a crotchet into the upper and back part of the neck, placed a cord around each fore leg, and confided them to an assistant. By this I thought we had gained a powerful advantage, but we were sadly deceived; for, from the emphysematous state of the foetus, delivery by this means was entirely hopeless. There was no way that I saw now of accomplishing our purpose but by again having recourse to embryotomy.

I therefore proceeded to detach one of the fore legs and shoulder, which, by the help of an assistant pulling strongly at the parts and an active use of the knife, was accomplished in a short time. We now tried again to extract the parts remaining; but in this we were again foiled. For, after having drawn out the remaining fore leg and shoulder, we found an insuperable bar to our proceedings from the immense size of the thorax and abdomen. My next act was to make an opening into the internal parts of the body, and this I did by cutting out a portion of the anterior ribs, &c. by which opening the contents of the thorax were evacuated. Pushing my hand on through the diaphragm, I succeeded in re-

moving the contents of the abdomen also. Thus it appeared now we had almost gained our point, and the extraction seemed to be near a conclusion; when, lo! as soon as the haunches of the fœtus reached the bones of the pelvis we found ourselves at a stand still again; nor, with all our united efforts, could we gain any more advantage. Remembering at this time a similar case in a mare (where all attempts to deliver the hind extremities had proved fruitless until I was called in), I again had recourse to the knife, and divided the lumbar vertebræ, separated the adjoining muscles, and by this means got clear of all incumbrance save the hind quarters. From this last section I had gained so much room that I could introduce my hand and arm for examination, when I soon discovered the obstacle to our proceedings. The hind feet and legs had become impacted forward, and were pressing against the lower parts of the pelvis, in a manner resembling that of a dog sitting upon its haunches. By pushing the parts *in utero* back, and as it were head over heels, I easily gained hold of the hind feet, which without much manuduction were placed in a state to expedite delivery; and thus, as in a breech presentation, with the belly of the calf turned upwards, I easily succeeded in relieving the animal from her sufferings.

All the while this was transacting, which, of course, occupied no short time, the animal remained firm and strong. Twice she had a little gruel offered, which she drank with avidity. Labour pains returned at intervals, but were neither strong nor lengthened. The case happened in the midst of winter, at a time when the ground was thickly covered with snow. The animal had been lying out during the winter, and up to the present time her owner had visited her. After she got quit of her burden she began to feed, and appeared as tranquil as could be expected in her situation. She was driven home next day, and needed little more afterwards than ordinary attention.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—Hon.

TRAVELS IN THE HIMALAYAN PROVINCES OF HINDUSTAN AND THE PANJUB; IN LADUKH AND KASHMIR; IN PESHAWAR, KABUL, KUNDEZ, AND BOKHARA. *By Mr. WILLIAM MOORCROFT and Mr. GEORGE TREBECK, from 1819 to 1825. Prepared for the Press from original Journals and Correspondence, by HORACE HAYMAN WILSON, M.A. F.R.S.* In two vols. 8vo, pp. 439 and 508. Murray, London, 1841.

THE traveller whose name stands first in the above announcement, whose adventurous spirit and laudable ambition for professional distinction first induced him to quit his native country for Hindustan, and subsequently led him amid the wild and unknown mountains of Central Asia, was originally brought up as a surgeon, but afterwards was persuaded to quit that line of life for the study of veterinary science, at the instigation of no less a man than the celebrated JOHN HUNTER. To St. Bel is justly assigned the merit of being the founder of veterinary schools in Britain. He was the first Professor at the present Royal Veterinary College of London; though he was soon dislodged from his post of honour by death—too soon, indeed, to afford him time for carrying out plans he had in view, comprehensive and judicious, for the cultivation of an art up to that time, in our own country, in a sadly depressed and neglected condition. At St. Bel's decease, the professorship fell into the joint hands of Moorcroft and Coleman. This co-professorship, however, held together but a very short time. What the precise cause or nature of rupture was, we are hardly sufficiently well informed to trust ourselves to repeat; though, from all that has reached our ears pertaining thereto, we should feel but little hesitation in believing that Moorcroft, with his chivalrous spirit and ambitious bent of mind, was a person ill calculated to play second fiddle to any man, even supposing he could for any very long time content himself with equipollent sway. Moorcroft's star appears to have been ever on the ascendant. And that it rose, even before he quitted England, to a more than ordinary height among veterinary constellations, and gave promise of still higher flights, we are, we think, in possession of satisfactory evidence to shew; while the volumes before us—which, through the kind thoughtfulness of a valued friend

have recently been placed in our hands—bear within them ample testimony of the appliance of the same talent and energy in a sphere of research which, if not altogether alien to his professional pursuits, was at least sufficiently different from them to call for something beyond the mere flexibility and power of an ordinary mind.

After seceding from the joint-professorship, leaving Coleman in sole possession thereof, Moorcroft opened an establishment on his own account in Oxford-street—the same which has since grown so extensive and flourishing under the no less universally known than respected name of FIELD. As a private practitioner, Moorcroft appears to have received the support of all the noble and opulent horse characters of his day; and was, without doubt, in the road to fame as well as wealth. On this road, however, he was arrested by a handsome offer from the East India Company to embark for Hindustan; and thither he immediately went in the lucrative and elevated situation of superintendent of the Company's studs. In this commanding station his chief duties became that of improving the native breeds of Indian horses. To a great extent he effected this by procuring the best stock the country around him afforded. At length, however, he felt the necessity of *cross*—of mingling foreign blood with the indigenous; and he became desirous, in order to bring this about with blood such as no other part of the world could afford him, of revisiting his native country. To this expedition the Company refused assent: the consequence was he was left to his Indian resources. Then it was that Moorcroft meditated travelling into the Himalayan provinces. Unexplored as these mountainous regions remained, he felt on that account the more anxious for such a trip; and he was joined in this spirit of research and adventure by a young, warm-hearted, talented friend, by the name of Trebeck. It was a bold and hazardous enterprise; but the minds of both our heroes were made up to it, little dreaming, poor fellows! that both of them would have to leave behind them their

“ Stiffened corse,
Stretched out and bleaching in the Himalayan blast.”

The annexed biographical sketch of Mr. Moorcroft, from the pen of Mr. Wilson, the compiler of these volumes, will serve to fill a void in veterinary records; at the same time that it can hardly fail to prove an acceptable *morceau* to those who desire some acquaintance with the memory of a man who was, if not the very first, one of the first to drag our degraded art into notice, and give it something like such a form and rank as it has since shewn itself deserving of; though it may not, as yet even, to our full satisfaction, been able to attain thereunto.

Mr. William Moorcroft, who is to be regarded as the originator of the journey, and the principal of the enterprise, was a native of Lancashire, and was educated at Liverpool for the profession of a surgeon. Upon the completion of the usual course of study, however, his attention was diverted to a different pursuit, and he finally settled in London as a practiser of veterinary surgery. His reasons for the change are thus detailed in a letter written from Kashmir to a friend in London.

“Whilst a pupil of Dr. Lyon, the colleague of Dr. Currie at the Liverpool Infirmary, the attention of the physicians and surgeons of that institution was suddenly and strongly called to a formidable epidemic disease amongst the horned cattle of a particular district, and was thought to be extending. It was agreed to depute a pupil to examine the disease upon the spot. The choice fell upon me; and in company with a Mr. Wilson, the ablest farmer of the day, I performed my commission. As arising out of this occurrence, it is only necessary to remark, that two gentlemen, of whose judgment and patriotism I had the highest respect, took the trouble of endeavouring to shew, that if I were to devote myself to the improvement of a degraded profession, closely connected with the interests of agriculture, I might render myself much more useful to the country than by continuing in one already cultivated by men of the most splendid talents. Convinced by their arguments, but opposed by other friends, and especially by my master, the matter was compromised by a reference to the celebrated John Hunter. After a long conversation with me, Mr. Hunter declared, that if he were not advanced in years, he himself would on the following day begin to study the profession in question. This declaration was decisive, and I followed the course of study which Mr. Hunter was pleased to indicate.”

As there was no veterinary college in London at the time, Mr. Moorcroft went over to the continent, and resided for some period in France. On his return he settled in London, where, in conjunction with Mr. Field, he carried on for some years a very prosperous and lucrative business. The nature of the profession, however, involved many occurrences unpleasant to a man of cultivated taste and warm temper, and, amidst intercourse with persons of station and respectability, collision with individuals not always possessed of either. Mr. Moorcroft, therefore, became disgusted with his occupation, although he speedily realised a handsome property by it. A great portion of this, however, he lost in some injudicious project for manufacturing cast-iron horse shoes, and he readily, therefore, accepted an offer from the Court of Directors of the East India Company to go out to Bengal as superintendent of their military stud. He left England in May 1808, in the same fleet, though in

a different ship, with the writer of this notice, who, when he occasionally saw Mr. Moorcroft during the voyage, as the vessels spoke, or on their touching at Madeira, little anticipated that he should ever become his biographer.

The Company's stud was instituted for the purpose of improving the indifferent breed of horses indigenous in Hindustan, for the special service of their own cavalry. That the object had not been successfully prosecuted is to be inferred from the necessity of obtaining scientific superintendence from England. That it was attained in a very eminent degree within a reasonable period after Mr. Moorcroft's appointment, the observation of persons in India, however little conversant with the subject, could not fail to remark. In the letter above cited, Mr. Moorcroft observes, that, at the time he left the stud on his present travels, there was not above one horse diseased for ten that he had found when he took charge of it. This amendment he attributes, amongst other things, to the use of oats as food, the cultivation of which grain he introduced into Hindustan. In order, however, to improve essentially and permanently the cavalry horse of India, and especially in size and strength, Mr. Moorcroft strenuously urged the introduction of the Turkman or English in preference to the Arab horse. His representations were at one time so favourably considered by the authorities in India, that he was on the eve of being permitted to return to England to select a batch of suitable stallions; but the purpose was abandoned, and his thoughts were thenceforward fixed exclusively upon the neighbourhood of Balkh and Bokhara. This was the leading motive of his journey across the Himalaya, and this purpose prompted the second journey, which terminated fatally for his project and himself.

Coupled with the conviction that the native cavalry horse of India could be ameliorated only by an infusion of the bone and blood of the Turkman steed, was an equally strong belief in Mr. Moorcroft's mind of the possibility of establishing a commercial intercourse with the Trans-Himalayan districts, which should be highly advantageous to Great Britain. In some respects the belief was founded on sufficient premises. To the anticipation of an extensive demand for British fabrics, both of hardware and of woollen cloth, from the known absence of all manufacturing skill in the countries of Central Asia, and the necessity of warm clothing imposed by the climate, was added an acquaintance with the fact, that these very articles, some of continental and some of British manufacture, found their way from Russia across the whole of the intervening regions, even to Afghanistan and the Panjub. To secure a part, if not the whole, of this commerce, was an object which Mr. Moorcroft entertained with the ardour and tenacity of

his character ; for, as he observes of himself, " his obstinacy was almost equal to his enthusiasm," in which, however, for obstinacy, his friends would substitute perseverance. Accordingly, having wrung from the government of India a reluctant acquiescence in his journey to Bokhara for the purpose of procuring horses, he also obtained its permission to carry with him such articles of merchandize as he thought likely to be most in demand. The ultimate proceeds of these articles were to be expended in the purchase of horses, which were, in the first instance, to be offered to the Government for sale: such as they disapproved of were to be disposed of through other channels. The principle of the experiment was, no doubt, creditable to Mr. Moorcroft's patriotism ; but many disasters, and much delay—eventually the cause, perhaps, of his death—may be ascribed to his incumbering himself with heavy packages amidst impracticable routes, and amongst people who are little better than organized robbers, and who welcome the stranger merchant to their haunts merely that they may revel on his plunder."—*Preface*.

In the paragraph hereto subjoined, but which in the work precedes the extract we have just concluded, Mr. Moorcroft appears in the noble character of an adventurous and intrepid explorer of countries unknown to other parts of the world, amid all the perils and dangers and countless obstacles with which such enterprizes must ever be beset. He was not a man, however, to be turned from his purpose. Exposure, fatigue, sickness, but delayed, frustrated not his object. If, as an undaunted and undauntable traveller, he had a fault, it was probably that, at times, he would assume a little authority beyond what he was legitimately armed with, and hence some little bickering on occasions between John Company and himself. There was also one other little point on which John and he did not exactly hit it, and that was the *exchequer* he was during his travels furnished with or permitted to draw upon as necessity required. That Moorcroft was either particularly economical or particularly scrupulous, we think no one who reads his "Travels" will discover: at the same time that he was—what we have asserted him to be—a man of first-rate talent, indomitable energy, and untiring perseverance, we think will everywhere appear; and, as such, could, properly managed, have proved nothing short of a most valuable servant to the Company, at the same time that he was promoting science in every commendable manner. With these few remarks, we shall continue our extracts from the "Preface" of the work, leaving those we have made from the "Travels" to another occasion.

* * * *

"The most enterprising, and, in a great measure, the most successful efforts to penetrate into Central Asia from Hindostan, have been made by, or have originated with, Mr. William Moorcroft; and these were undertaken not only without the encouragement of the government of India, but without their expressed approbation. A cold permission was Mr. Moorcroft's only incitement beyond the stimulus of a speculative mind and an enterprising disposition. His first attempt, which was made by way of Chinese Tartary, has been long the property of geographers, having been published in the twelfth volume of the *Asiatic Researches*. In this journey he was the first European to cross the Himalaya, and make his way to the great plain between that and the Kuenlun chain, the situation of the sources of the Indus and the Sutlej, and of the two remarkable lakes of Kávan and Mánasa. Besides the natural difficulties of the way, he had to elude the vigilance of the Nepalese, then masters of the Himalaya, and who were on the eve of that war with the British which transferred the snowy mountains to the latter. Mr. Moorcroft had also to conciliate the Chinese authorities beyond the Himalaya; and, in spite of all obstacles, and of sickness, induced by exposure and fatigue, he accomplished his purpose, ascertaining not only the valuable geographical facts, alluded to (the situation of the sacred lakes of the Hindus, and the upper course of two important rivers), but the region also of the shawl-wool goat, and opening a way for the importation of the wool into Hindustan, and finally into Britain. Mr. Moorcroft's ulterior object, however, was to penetrate to Turkistan, to the country of a breed of horses which it was his great ambition to domesticate in India.

* * * * *

"Certain it is, that the government of India never recognized Mr. Moorcroft in any diplomatic capacity, and his supposed assumption of it occasionally incurred their displeasure.

* * * * *

Part of the detention at Sadahk was owing to pecuniary difficulties. Unable to dispose of his merchandise at a fair price, the expense of maintaining his party, consisting of forty persons, for so long a period, exhausted Mr. Moorcroft's finances, and he was obliged to negotiate bills upon his agents in Calcutta, through the Resident at Delhi.—Sir David Ochterlong. That officer, probably, did not consider himself authorised to advance money on the bills, at least without reference to Calcutta; some, therefore, he hesitated, some he refused to pay, and considerable delay ensued, which, whilst it subjected Mr. Moorcroft to much anxiety, prevented his departure to Ladahk. This conduct of the chief

authority at Delhi he deeply resented, and addressed him a letter, of which some extracts may seem to mark the warmth of his feelings, both of resentment and gratitude.

* * * * *

“‘When my days were racked with anxiety, my nights passed in sleeplessness,—when I saw only a refuge from loss of character in the miserable expedient of selling merchandise at one-third of its value, from a general combination of Kashmeri against me,—Providence raised up a friend in a native of Khojand, a trader of Yackland, whose feelings of respect for British merchants, impressed by accounts related to him in Russia, induced him to advance money to relieve my embarrassment.’”

* * * * *

Mr. Moorcroft remained at Bokhara nearly five months.

* * * * *

“He was received by the king with as much kindness as could be expected from Ahi Hyder—a selfish, sensual, and narrow-minded bigot; and after various difficulties, arising from the meanness and cupidity, chiefly of the monarch himself, disposed of part of his goods, and effected the purchase of a number of valuable horses, with which he purposed to return to Hindustan. After crossing the Oxus, on his way back, about the 4th or 5th of August 1825, Mr. Moorcroft determined to deviate from the road, in order to go to Maimana, where he understood it was likely that he should be able to make important additions to his stock of horses. ‘Before I quit Turkistan,’ he writes from Bokhara, ‘I mean to penetrate into that tract which contains, probably, the best horses in Asia, but with which all intercourse has been suspended during the last five years. The experiment is full of hazard, but *le jeu vaut bien la chandelle*.’ His life fell a sacrifice to his zeal. At Andhko, where he spent some days in effecting purchases, he was taken ill with fever, and died.

Of the particular circumstances of his death there is no satisfactory account, as he had quitted his party, and was attended by a few servants only, and a son of Wasir Ahmed, a Pirzada, or Mahommedan of a religious character, who had replaced Mir Jyzet Ullah as his native secretary and interpreter. It was reported that he had been poisoned; but there is no reason to believe that this was the case, although he had fallen amongst robbers, who seized upon his property, and put his followers into confinement. Such was the luckless fate of an individual who, whatever may be thought of his prudence or judgment, must ever stand high amongst travellers for his irrepressible ardour, his cheerful endurance, his inflexible perseverance in the prosecution of his objects, and his disinterested zeal for the credit and prosperity of his country.

The liberation of Mr. Moorcroft's servants having been, with some difficulty, obtained by the efforts of the son of the Pirzada, they conveyed their master's body to Balkh, where it was buried.

* * * * *

Deprived of a leader, the other members of the party dispersed, and the property being left without a responsible owner, was seized upon by Ata Khan, the mutawala, or manager of the holy shrine at Mazar. The son of Wasir Ahmed managed, however, to secure a few horses, some of the property, and most of the papers of Mr. Moorcroft, and with these effected his return to Kabul, where his arrival was announced to Mr. Charles Trebeck, by Gwendas Sinh, a banker of Kabul, from whose report the circumstances attending the death of the travellers, as here particularized, are derived. The accounts collected by Lieut. Burnes on the spot are somewhat different.

“The caravan assembled outside the city, near to another melancholy spot—the grave of poor Moorcroft—which we were conducted to see. Mr. Guthrie lies by his side. It was a bright moonlight night, but we had some difficulty in finding the spot. At last, under a mud-wall, which had been purposely thrown over, our eyes were directed to it. The bigoted people of Balkh refused permission to the travellers being interred in their burial-ground, and only sanctioned it near the city, upon condition of its being concealed, lest any Mahommedan might mistake it for a tomb of one of the true believers, and offer up a blessing as he passed by it. The corpse of Moorcroft was brought from Andhkoh, where he perished at a distance from his party. He was attended by a few followers, all of whom were plundered by the people. If he died a natural death, I do not think he sank without exciting suspicion; he was unaccompanied by any of his European associates or confidential servants, and brought back lifeless on a camel, after a short absence of eight days. Mr. Trebeck's health did not admit of his examining the body.”—*Burnes' Travels*, i, 243.

* * * * *

Mr. Moorcroft's character as a traveller will also be best elicited from the perusal of his journals. In many respects he was most eminently qualified, and was not to be surpassed in determination, hardihood, endurance, and spirit of enterprise. His scientific attainments were strictly professional, and he had neither the preparatory training nor the means to investigate profoundly the mysteries of nature. Neither was he an oriental scholar or an antiquarian, although he had a practical use of some of the dialects of the East, and took a ready interest in the remains of antiquity which he encountered. His chief objects were on all occasions rural economy and manufactures, as he entertained a notion that much was to be

learned in both from the natives of the East, as well as to be communicated to them. So much was he impressed with the capabilities of the countries he visited, and the advantages to be derived from the cultivation of their products, that it was his serious intention to settle, upon his return, in the lower range of the Himalaya, and devote the rest of his life to the occupations of a farmer. With such views and impressions, therefore, much that recommends travels in the present day—liveliness of general description, moving incidents by flood and field, and good-humoured garrulous self-sufficiency—are not to be looked for; but if the travels of Moorcroft and Trebeck are not quite so amusing as those of some more modern voyagers, it is to be hoped that they will more than compensate for the deficiency by merits of their own."

Extracts from Foreign Journals.

THE CENTRAL SOCIETY OF VETERINARY MEDICINE OF PARIS.

OUR Number for last month contained sketches of proceedings and addresses at this Society on the occasion of its opening (in 1846), and on that of its second meeting at the conclusion of 1847. We are now going to redeem the promise we then made of giving abstracts from the reports made at these two annual meetings, beginning with that for the session ending 1846.

After M. Girard had concluded his opening address, M. H. Bouley, the annual Secretary of the Society, read the following *Compte-rendu* of its proceedings for the past year:—

It is customary with re-unions instituted like our own for the improvement, through their united efforts, of some one special science, at the conclusion of each session to suspend for awhile their routine business, in order to devote a few moments to a hasty retrospection of results emanating out of their past labours.

A halt of this kind enables us to possess ourselves of what we have accomplished, and, by a retrospective *coup d'œil*, finding this has not proved unattended with good, we derive confidence in the future, and courage to pursue with greater ardour our not wholly unprofitable labours.

The Central Society, adhering to a custom no less honourable for its antiquity than its excellence, now for the first time since its foundation presents itself before the public with some account of its transactions.

Under these circumstances, as the organ of the Society, it is my duty to endeavour to fulfil this difficult mission ; and I do so, confidently reposing in the indulgence of those around me, who will not expect in this our first essay such precision and form of language as is usually heard from men experienced in solemnities of the kind.

The first efforts of the Society had to be directed to its own institution (in 1844), and a difficult matter this turned out, surrounded as we found ourselves at the time by convulsions everywhere agitating our professional world.

Far from me, gentlemen, be the thought of wishing to rekindle extinct animosities ; but, as historian of our Society, I must for a moment recall days gone by, in order to shew how it first came to be instituted.

For some years many veterinarians of the provinces had shewn, by their example, the advantages to be derived from scientific association, ere Paris had dreamt of any such movement.

Veterinary science, for whose improvement our Society is founded, is that branch of knowledge which is engaged in the conservation, perfectionization, and utilization of domestic animals.

To attain this triple object, so vast, so complex, calls for the concurrence of anatomy, physiology, hygiène, medical science, natural history, agriculture, physics, chemistry, botany, mechanics, and even law ; or, rather, each of these branches of knowledge furnishes a sort of contingent towards the constitution of this complex, diversified, and yet harmonizing whole, called veterinary science.

At first view, it might seem that an assemblage so vast and extensive required the *concours* of many individuals specially devoted to each department, in order that, by a sort of division of labour, all the detail might be met, and better worked out ; a system, according to which a veterinary society should be a reunion of anatomists, physiologists, agriculturists, surgeons, veterinarians, chemists, grooms, physicians, jurisconsults, and even blacksmiths, each contributing, according to his vocation, to the common work.

This, however, would deprive the veterinary art of its individual character ; would convert it into a sort of *pêle-mêle*, of grouping without order, without method, without object ; a crowd of ideas and opinions, of works good in themselves perhaps, but without connexion between them, and frequently without any possible application.

What constitutes the individuality of veterinary science is the regular and methodic disposition of these contingent parts ;—anatomy, physics, chemistry, botany, agriculture, jurisprudence, shoeing, &c. ranged around the other central and preponderating parts,

viz. medicine, hygiène, physiology. These govern the first, group them around them, and cement them together into a combination perfectly consistent with nature.

To embrace this concentration, to understand the harmony of it, to appreciate what the influence of every constituent part should be, and what its relation is with adjacent parts, we must not confine ourselves to the study of any one in particular among them. We must have looked into all of them, have studied them all in succession, and in their reciprocal connexion; in a word, we must have become veterinarians.

Such, gentlemen, was the view you took when you came to the wise decision in one of the laws of your constitution, that none but veterinarians could become members of your society.

I am aware it may be said, we have too much narrowed our system in so completely isolating ourselves, in not giving to sciences in connexion with our own, medicine, agriculture, pharmacy, at least to a certain extent, a representative among us. It might be said that, in so acting, we have voluntarily shut out from among us lights ever resulting from analogy and comparison. This objection is a grave one, gentlemen, and you have discussed its full weight on the occasion of making your laws. You have considered that, before you called to your aid foreign *colloborateurs*, it were better, in the first instance, to have your constitution exclusively of yourselves, to depend alone upon your own resources, and thus to establish a society permanent and pregnant in useful labours.

At the period and under the circumstances we are at present acting, when there is a disposition abroad to deny the veterinary a place among sciences—although the world is yet in ignorance of the reach and extent of our science—is it not of the greatest importance to us to shew the possibility of making up a society out of the members of our profession, and to prove that there exists no scientific question standing without the pale of its competence?

Then, when you have given proofs of what you are able to do, made yourselves strong in your position by antecedent labours, and having your individuality well established, you will be at liberty to assimilate foreign bodies without the apprehension of having thereby your own homogeneity interrupted.

Moreover, the validity of the objection just urged against exclusiveness is weakened when we come to consider that, in a society wholly veterinary, the elements of comparative studies are not likely to be wanting.

In fact, notwithstanding every subject embraced by our science may be found united where competence exists, yet, will the indi-

vidual not have studied all alike. Individual dispositions, particular vocations, necessities of position, will cause a determination in favour of this or that branch of science, and cause the development of special superiorities; and so, amidst a group actuated by the same views and the same objects, diversifying the characters, modifying the aptitudes, and resembling, if I may borrow a comparison from physiology, so many separate organs, which the society use for the purpose of assimilating the complex facts brought before them.

The remainder of the Report has especial reference to the organization of the society.

VETERINARY EXAMINATIONS.

To the Editor of "The Veterinarian."

Sir,—IN your last Number I addressed a letter to you on the subject of the establishment of private or spurious Boards of Examination, and warned any who might be tempted to appear before them of the position in which they would hereafter stand by so doing; but the warning has been thrown away, and some twenty unfortunate individuals have taken an irrevocable step, and placed themselves for life in the ranks of the farriers, quacks, or unrecognizable classes with which the country swarms. That persuasion and influence have been at work is too clear, and when placed at such a distance that supervision is out of the question, evil counsellors have fearful power; even after the appearance of my warning several were gained over, by what means may be guessed at, though, perhaps, it would not be prudent to express.

As announced in the Scotch local papers, we find that, on the 18th and 19th instant, a Board, consisting of the following individuals, met in Edinburgh for the purpose of manufacturing veterinary surgeons:—

Mr. Burn Murdoch in the Chair.

Mr. Brown, V.S. to the cavalry regiment at Edinburgh.

Mr. M'Robie, V.S., Stirling.

Mr. Alexander Watt, V.S., Edinburgh.

Mr. Balfour, V.S., Cramond; together with Dr. Mercer, Dr. Wilson, lecturer on chemistry to the class; and Mr. Barlow, demonstrator to the school; and twelve physicians and surgeons.

Before this body some twenty-four students appeared, and some twenty were dignified by the receipt of documents with high-sounding names, but which, for any practical purpose, are utterly valueless.

How much better would it have appeared, if those gentlemen who are members of the medical profession had taken the trouble to inquire how far they were justified in interfering or setting themselves up as infringers of the laws, rights, and privileges of a corporate body with which they have no connexion! What would they say, were any of the members of the veterinary body corporate to take part in the manufacture of physicians or surgeons? Would Drs. Lizars, Handyside, or Burt, submit to such an attempt with quietude?—would they tolerate such a proceeding? Let them ask their own consciences this question, and the answer is an indignant *No!* Then, why do they so act towards us? Let them rest assured that they have cast a stigma on their names which will not readily be forgotten. As for those who profess to be members of my own profession, I blush for them; and men who can so act are beneath criticism.

But what, in the name of all that is just, have the Highland Society or Mr. Burn Murdoch to do with the veterinary profession? What has given them the power of making, or assisting to make, veterinary surgeons? By what right do they fly in the face of Her Majesty's Acts? By what qualification can they judge of either the capabilities of the teachers, or of the capacity of the students? To answer, to define these queries, would be beyond the capacity of a Solon—for none of them have a shadow of an existence. It is mere assumption, arising from a desire for meddling, and playing the part of patron.

The same game has been tried hard for in London, and manifold have been the journeyings and correspondence to get up a Board; numerous their disappointments, ceaseless their trouble. I have letters before me from those who have been applied to and refused. The English body of veterinary surgeons are not to be tampered with. There may be, and doubtless there will be, found some who are so lost as to be led astray; but no man of repute will be found amongst them. Let us wait until such parties make themselves known, and see how they will like exposure; for, rest assured, they will obtain it, and to their cost, too.

A Board is stated to be appointed to meet on Thursday, the 27th instant; but no announcement has yet been made of its constituents; nor were there, two days since, any candidates for them to examine. If men are disposed to thus suffer themselves to be

misled, no warning will prevent them; and whether they be the examiners or examined, they will meet with their due reward.

I could say much more, and the materials are lying at my hand; but I am intruding on your space.

I am, Sir, your's, obediently,

ARTHUR CHERRY.

April 24th, 1848.

THE VETERINARIAN, MAY 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

WHILE the proceedings of the Royal College of Veterinary Surgeons have all along been marked by that openness and honesty of purpose which long before this cannot fail, in every unbiassed mind, to have bespoke for them unqualified approbation, and while the soundness of the cause their Council have had and yet have to battle for—which may be alleged as the best motive for such upright proceedings—has shone conspicuously all the way through, for our own part we have never until the present moment—and we say this more in shame than in boast—made any mention of the talent displayed in the framing and wording of the several public documents from time to time issued by the Council. It was our duty to have done this, because the talent exhibited in these instruments is not of the ordinary measure: in proof whereof, we might recall to our reader's memory the annual reports for the three years the Charter has been in existence; the "objections" urged, on the part of the College, against any alterations being made in their Charter, published in *THE VETERINARIAN* for 1846; the "Memorial" in the same volume; the "Reply," likewise, in the form of Memorial, in our current volume. We need not, however, trouble our reader to rise from his seat for evidence, strong and convincing, of ability for office of our hard-working Council. We simply ask him to attentively peruse their supplementary "Memorial," which we this month publish.

And when he has done this, and well considered all that has in relation to it passed before, as well as the circumstances under which it is now put forth, let him, unbiassed and unprejudiced, come coolly and deliberately to his own conclusions as to the amount of talent and ability to be found in the Council of the Royal College of Veterinary Surgeons.

It has been said, and said with considerable shew of reason, that

“ Good wine needeth no bush ;”

whence the inference might be drawn, that a cause sound in itself does not of necessity call for aid from talent. We all, however, and some, perhaps, to our misfortune, know how many “ good” causes have been lost for lack of able advocacy ; but we know from experience, while truth and justice will ever shine brightly in the meanest vestments, their contraries may be so meretriciously bedecked and bespangled that much beyond ordinary pains-taking and common sagacity is demanded to drag the wolf out of his sheep’s clothing. However praiseworthy our cause may be from its inherent integrity of purport and purpose, brighter and better stands it forth in the admirable argument and diction in which our Council have afforded us ample evidence of their possessing the power to invest it.

We sincerely congratulate our young friends now arriving at the conclusion of their studies at “ College,” on the suspension of the apprenticeship clauses in the bye-laws, and, with them, the alternative law of spending four sessions at school. Under all the circumstances pressing upon them ; with, on the one side, representations from pupils that they had been allowed to enter college without being made acquainted with the operation or even the existence of such bye-laws ; and with threatenings, on the other side, that advantage would be taken of this predicament of the pupils, by setting up other extra-charter boards of examination ; under these cogent and unprecedented circumstances, we say, we do not see how the Council could well refuse this boon to the pupils. Nor was there, we are happy to have it in our power to add, any disposition on the part of the Council so ungraciously to act. Quite the contrary. The motion for suspension was no sooner made, than it was unanimously received and unanimously passed.

VETERINARY AND MEDICAL JURISPRUDENCE.

SHAW *v.* THE YORK AND NORTH MIDLAND RAILWAY COMPANY.

THIS case was tried before Mr. Baron Alderson, at the last Assizes for the county of York, when a verdict was given for the plaintiff.

Mr. Knowles, Q. C., now moved for a new trial, under the following circumstances:—The action was brought to recover damages for injuries sustained by the plaintiff's horse while being carried in one of the company's carriages, which was defective in some particulars, whereby the injuries were occasioned. The ticket given to the plaintiff upon the delivery of the horse was put in evidence, from which it appeared that the horse was agreed to be carried upon the terms that the company should not be responsible for any injury or damage, however caused, while travelling, or while loading or unloading. It was held by the learned Baron that this evidence did not support the contract as set out in the third plea; and that it was the duty of the defendants, as common carriers, to supply a fit carriage for the conveyance of goods, of which duty the plea took no notice. He (the learned counsel), however, contended that a carrier might, if he pleased, enter into a special contract to carry goods upon certain terms, as had been done in the present case.

Lord Denman said, the question was important, and worthy of being discussed: the Court would, therefore, grant the rule.

Rule *nisi* granted.

The Times, April 17, 1848.

RIGHTS OF PHYSICIANS.

CLARK *v.* FREEMAN.*Rolls' Court.*

[Before the Master of the Rolls.]

MR. TURNER (with whom was Mr. Wickens) moved in this case, on behalf of the plaintiff, Sir James Clark, Bart., Physician in Ordinary to the Queen, to restrain the defendant, Richard Freeman, a chemist, living at 5, Clayton-place, Kennington-road, from selling or offering for sale some pills, of which he was the manufacturer, in such manner as to represent them to be the pills of the plaintiff,

and from holding himself out to be the agent of the plaintiff for the sale of the pills. It appeared that the defendant manufactured the pills in question for the cure of consumption and other pulmonary complaints, and, to puff them off, he published advertisements and circulated handbills so worded as to lead the public to suppose they were the pills of Sir James Clark, who enjoys a great reputation in pulmonary disorders, having written some treatises on the subject. One of the advertisements was headed, "By her Majesty's permission, Sir J. Clark's Consumptive Pills, a certain cure for consumption, and an unfailing remedy for coughs, asthma, difficulty of breathing, &c.;" and then followed a dissertation on pulmonary disorders and an eulogy of the pills; and at the foot, "Agent, Mr. R. Freeman, Kennington-road, and to be had of any medicine vender. 2s. 9d." There was also a representation of the royal arms after the words "Her Majesty's permission." Another advertisement was in the form of an apology to the medical profession for selling a patent medicine. The defendant had spelt the name of Clark with an *e* at the end; but the intention appeared to be to induce the public to believe that the pills were manufactured and sold under the direction of Sir James Clark.

In support of the application, an affidavit of the plaintiff was read, in which he stated that he had caused the pills to be analyzed, and had found that they contained antimony and mercury, which were very injurious in many cases of consumption. He had received several letters from parties in the country, some asking him how they were to use the pills, and others complaining of the ill consequences which had followed from the use of them. It was contended, that as it was not only a gross imposition on the public to represent the pills as the plaintiff's, but as it would also tend to injure the reputation and practice of the plaintiff, the court ought to interfere by injunction. The defendant had no right to use the plaintiff's name to enhance the value of his own wares, or to hold himself out as the agent of the plaintiff in the sale of a quack medicine. The conduct of the defendant gave the plaintiff a right of action against him; and where damages were recoverable in an action at law, the court would grant an injunction. In the case of "*Lord Byron v. Johnston*" (2 Meriv. 29), Lord Eldon granted an injunction to restrain the defendant from selling some poems as Lord Byron's which were sworn not to be his; and so here the court ought to restrain the defendant from selling pills as the plaintiff's which were not his.—*The Master of the Rolls* thought he had not jurisdiction to interfere. There could not, he said, be any injury to property so as to induce the court to interfere. An attempt to impute to Sir James Clark that he had any thing to do with a quack medicine was, perhaps, defamatory to his character,

but he could not imagine that a person in his position could be seriously injured by it. It was one of the taxes imposed on eminent men to have their names thus made use of. No doubt, also, an attempt to connect Sir James Clark with a quack medicine was a great injury to the public, who were induced to adopt remedies which were highly prejudicial. But this was in the nature of a public offence; and Lord Byron's case differed from the present in this respect, that Lord Byron was in the habit of writing and publishing poems, but Sir James Clark was not in the habit of making and selling pills; he could not, therefore, be said to be injured in his trade or business by what was done by the defendant. He must refuse the application.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of March 29, 1848.

QUARTERLY MEETING.

(By an accidental error, the last Report was headed "Quarterly;" it should have been "*Special*" Meeting.)

Present—the PRESIDENT, the SECRETARY, Messrs. ARTHUR CHERRY, MAYHEW, FIELD, HENDERSON, GODWIN (Birmingham), CHERRY, sen., JAS. TURNER, and ERNES.

THE minutes being read and confirmed, Mr. *Arthur Cherry* drew attention to the necessity for giving notice by advertisement of the position any parties who might think proper to accept certificates from any self-constituted and miscalled board of examination would occupy thereby, and read a draft of advertisement for this purpose; which, after a short discussion and a few verbal alterations, was unanimously adopted. [See wrapper of VETERINARIAN for April.]

The Secretary then laid before the Council the draft of a Memorial to the Home Office as prepared by the Committee appointed for that purpose, and proceeded to read the same. Several passages produced discussion, and were supported by other members of the Council; only one paragraph, though confirmed by all as to accuracy, it was thought would be better not inserted, and, on being put to the vote, it was struck out, the members forming the Committee declining to vote.

Mr. Godwin moved, and *Mr. Henderson* seconded, that the draft

just read be received and adopted : these gentlemen, together with Messrs. *Field* and *Jas. Turner*, spoke in high praise of the document laid before them.

Mr. Cherry, sen., denounced it as highly improper, erroneous in statements, dangerous in tendency, likely to provoke inquiry, and require proof hereafter to be given of the truth of the statements.

Mr. Arthur Cherry in reply, as a member of the Committee, stated that inquiry was the very object which the Committee had in view, during the preparation of the draft ; that there was abundant evidence of the validity of every statement—and that the Committee were ready to support every thing which had been advanced : so abundant were the materials, that there was more difficulty in selection than in refusal, and, above all things, they sought for inquiry.

Mr. Mayhew followed in the same views.

The motion was then put to the vote, and carried without a dissentient.

The *Secretary* read a letter he had received from Dr. McGrigor, Secretary to the Board of Examiners acting for Scotland ; also one from Mr. Rankin, containing some statements relating to the formation of a separate Board of Examination by Professor Dick, and putting some queries on these proceedings.

An official letter was read from Mr. Barlow, announcing that Professor Dick had appointed a Board of Examiners for the purpose of examining his pupils. A discussion ensued on these topics, and *Mr. Godwin* gave notice of motion, "That the ex-officio members of the Board of Examiners being engaged in the formation of separate Boards of Examination, contrary to the decrees of the Charter, be suspended or removed from their offices."

Mr. Mayhew gave notice of motion, "That application be made to certain official departments touching the admission of unqualified persons to hold appointments under them."

A question arose on lapsed presentation for examination ; and after some discussion it was moved by *Mr. Field*, and seconded by *Mr. Arthur Cherry*, "That a case be prepared, and opinion taken thereon ;" which was unanimously carried.

It was also moved, that a Committee be appointed to prepare the Annual Report, and that the same gentlemen who formed the Memorial Committee be appointed to prepare the Report. Carried.

It was moved by *Mr. Jas. Turner*, "that the 'Reply or Memorial Committee,' under the present aspect of affairs, do stand, and be under the direction of the President, that, should occasion arise, no time might be lost by the having to call a meeting of the Council to re-appoint such Committee." A general opinion on the

policy of this measure prevailed, and which was carried without any dissentient.

Adjourned.

[The "Memorial" will be found in another part of our Journal.]

Sitting of April 19, 1848.

A SPECIAL MEETING.

Present—The PRESIDENT, the SECRETARY, Messrs. ARTHUR CHERRY, HENDERSON, WILKINSON, CHERRY, sen., PEECH (V.P.), ERNES, ROBINSON, PERCIVALL, MAYER, sen., FIELD, KING, MAYHEW, and JAS. TURNER.

The Minutes being read and confirmed, the draft of the Annual Report as prepared by the Committee was read by the Secretary, which met with high approval. *Mr. Robinson* moved, and *Mr. Percivall* seconded, that the same be adopted, which was carried unanimously.

Mr. Cherry, sen., asked the question, whether it would be printed and placed in the hands of the Council previous to the General Meeting.

The Secretary said it would not be.

Mr. Mayhew said, that such a course had been adopted at first; but in consequence of the very unfair, improper, and unjust use which had been made of it, it had been discontinued, and he considered most wisely.

Mr. Arthur Cherry took the same view, and stated that a committee had been appointed to assist the Secretary in its preparation, expressly to avoid the recurrence of such scenes as took place two years ago.

The Treasurer laid before the Council a statement of the Funds of the College, and the balance-sheet was then read.

Messrs. Mayhew and Ernes moved and seconded, that the account be received and adopted. Carried.

The Secretary and *Mr. Arthur Cherry* moved and seconded, that the same be appended to the Annual Report. Carried.

The case directed to be prepared at the last Sitting was then read, together with the opinion thereon, and was to the effect, that, if a party allowed the period to pass without claiming the benefit which would accrue from application at or before the time, such claim became of no avail at a later period; but that the Charter gave to the Council the power of *suspending* any by-law *at their discretion*, though such law could not be altered or erased without giving three months' notice thereof.

A long and rather desultory discussion ensued, in which most of the members present joined.

The President said, that he had before him a document which might come very properly before them at this period of the meeting, and which was a Memorial from twenty-two of the students now studying at the Royal Veterinary College, praying to be relieved from the position in which they were placed in regard to not being able to produce indentures of apprenticeship; and also complaining that they had not been fully informed, at the period of their entrance as students, of what would be required from them in order to qualify them for presenting themselves for examination for the purpose of becoming members of the body corporate.

As notice had been given in the circular calling together the meeting,

The Secretary moved, "That the bye-law 2, sect. 6, relating to apprenticeship, be suspended for the present session;" which was seconded by *Mr. Percivall*.

A discussion ensued as to whether the suspension should be an open suspension, or apply only to those who had made application; which latter being put as an amendment, was lost, and the open suspension carried: it being distinctly understood that *every other* certificate of qualification would be required, and that the suspension be only for this session.

When the Memorial from the Students was read, it was attempted to be shewn that it was based on falsehood, and *Mr. Wilkinson* endeavoured very strongly to obtain the sanction of the Council to laying the document before the Professors, to prove the validity of its charges. But to this extraordinary proposal no attention was paid.

Mr. Mayhew warmly supported the right of memorializing, though he might condemn some of the steps that had been taken; but spoke very strongly against the manner in which students had been admitted as pupils, and felt that those who had been led astray were to be pitied, not punished, but that the punishment should fall on the right shoulders.

Mr. Percivall could not consent to any reference whatever, after the manner in which the Professors had treated the Council.

Mr. Arthur Cherry said, that he had for many months anticipated that some such measure as that proposed that evening must be adopted, and had, in consequence, taken much pains to become acquainted with the facts of the case, and was sorry to say that it had a very bad appearance: indeed, he thought that the Students had a just cause of complaint, and openly avowed himself as the advocate of justice towards the Students, as future members of the body corporate.

Much was said on these points, but chiefly repetitions ; and the matter ended by *Mr. Mayhew* moving, that the truth of the Memorial from the Students be inquired into, and which was unanimously carried.

Mr. Arthur Cherry, in the absence of *Mr. Godwin*, stated that he would bring forward that gentleman's motion for the suspension of the ex-officio members of the Board of Examiners, provided that the word "removed" be struck out; and stated that the course which he thought should be adopted was the suspension of those parties who had taken or were taking a part in the formation of private or spurious Boards of Examination, and that this had not any reference to their being professors or teachers: with that they had nothing to do; but when these parties accepted office under the bye-law appointing ex-officio members, they became the officers or servants of the Council, and the Charter gave them unlimited power over them; the object of "*suspension*" being, that any party who was not concerned in these obnoxious proceedings might have time to exculpate himself; but, should this not be done, judgment ought to go by default.

To these views there was a general assent, and the discussion was a repetition of the general statement. A few verbal alterations were made in the motion before it was put to the vote; which being done, it was carried unanimously.

Mr. Arthur Cherry then gave notice for suspension for three months, "That bye-law 3, section 6, relating to the appointment of ex-officio members, be rescinded."

Mr. Mayhew's notice of motion, that certain official parties be applied to, touching the holding of official appointments by non-members of the body corporate, was carried, to be left in the hands of the President; on which that gentleman applied for a committee to assist him, and which was left to his own nomination. Messrs. Gabriel, Mayhew, and Arthur Cherry, were named for this purpose.

Mr. Arthur Cherry then laid before the Council the third Report from the Registration Committee, together with a list of returned members, which was ordered to be printed.

Adjourned.

THIRD REPORT FROM THE REGISTRATION COMMITTEE.

The Committee have to report that a list of those members of the Royal College of Veterinary Surgeons who have made returns, together with those new Members who have received diplomas, amounting together to upwards of 800, has been prepared, alphabetically arranged, and is ready for printing.

The Committee have further to report, that the names of several

parties have not been inserted, on account of their having neglected to comply with the requisition made to them.

Some parties may not have been applied to, arising from a want of knowledge of their addresses.

The Committee beg to suggest to the Council the necessity for urging on the body politic and corporate the necessity for registration; otherwise it will not be possible for those parties who may neglect this to participate in any of the claims, advantages, or immunities, which now exist, or may hereafter be granted.

The Committee have studiously avoided the entry of any name in the list for which there has not been a voucher.

The Committee have also to state, that, since the commencement of their labours, several instances have occurred in which the assumption of the title of Veterinary Surgeon has been removed or prevented; and as the Members of the body corporate the more completely register, so will the improper assumption of the title become the more difficult.

The Committee have to regret that they have not received that assistance from parties of influence that they had reason to expect, but, on the contrary, it has been distinctly refused.

The Committee will be happy to receive notice of any errors that may have crept in, and also announcements of any changes of residence, or deaths.

All members who may have received certificates or diplomas regularly granted by either of the recognized veterinary schools previous to the granting of the Charter, may have, on application to the Secretary, proper forms for filling up, which names so entered, if correct, will be inserted in the next new list to be prepared; but the Committee cannot admit for insertion any name merely on report.

The Committee beg to acknowledge the kindness of those gentlemen appointed Corresponding Members, who have taken so much trouble to collect information, and to transmit the same to the Committee.

It is also recommended that, for the better distinction of Members of the body corporate, the letters M.R.C.V.S. be adopted instead of V.S.

For the Committee,

ARTHUR CHERRY,

Honorary Secretary to Committee.

April 19th, 1848.

MISCELLANEA.

RESTIVE HORSES.

“ No horse becomes restive in the colt-breaker’s hands ; nor do any, when placed in their hands, remain so. The reason is, that they invariably ride *with one bridle and two hands*. When they wish to go to the right, they pull the right rein stronger than the left ; and when to the left, the left stronger than the right. These are indications which, if the colt does not obey, he will at least understand, the first moment he is mounted, and which the most obstinate will not long resist. But, as may be supposed, *it takes a long time to make him understand he is to turn to the right when the left rein is pulled*; and it is only the most spirited and docile that will do this at all. Such, however, is the great docility of the animal, that a great proportion are, after long ill usage, taught to answer these false indications, in the same way that a cart-horse is taught to turn right and left by the touch of the whip on the opposite side of the neck, or by word of his driver ; and, indeed, such is the nicety to which it may be brought, that you constantly hear persons boast that their horses will ‘ turn by the weight of the reins on the neck’. This, however, only proves the docility of the horse, and how badly he has been ridden ; for a horse which has been finely broken should take notice only of the indications* of his rider’s hand on his mouth, not of any feeling of the reins against his neck.

“ This is a common error, both in theory and practice, with regard to the restive horse. He is very apt to rear sideways against the nearest wall or paling. It is the common way to suppose that he does so with a view of rubbing his rider off. Do not give him credit for intellect sufficient to generate such a scheme. It is, that when there, the common error is to pull his head *from* the wall. This brings the rider’s knee in contact with it ; consequently, all further chastisement ceases ; for, were the rider to make his horse plunge, his knee would be crushed against the wall. The horse, finding this, probably thinks it is the very thing desired, and remains there ; at least, he will always again fly to a wall for shelter. Instead of *from* the wall, pull his head *towards* it, so as to place his eye, instead of your knee, against it ; continue to use the spur, and he will never go near a wall again.”—*Hints on Horsemanship*.

* By *indications*, are meant the motions and applications of the hands, legs, and whip, to direct and determine the paces, turnings, movements, and carriage of the horse. I have used the word instead of “ aids.”

THE
VETERINARIAN.

VOL. XXI,
No. 246.

JUNE 1848.

Third Series,
No. 6.

FOURTH ANNUAL GENERAL MEETING OF THE
ROYAL COLLEGE OF VETERINARY SURGEONS.

ON Monday, the 1st instant, the Fourth Annual Meeting of the Royal College of Veterinary Surgeons was held, pursuant to public notice, at the Freemasons' Tavern, Great Queen-street, Lincoln's Inn-fields. The attendance of Members was not less than at the previous anniversary, there being above fifty persons present.

Thomas Turner, Esq., of Croydon (President of the College), occupying the chair, opened the business of the meeting by expressing the great happiness he felt at meeting the gentlemen present on that, the fourth year of the existence of their Charter. He could well remember that when the Charter was first obtained there were persons who insinuated that the Charter would not hold water, and that a coach-and-four might be driven through it; but he was proud to say that at this, the fourth year, it was still intact, and steadily progressing for the benefit of the profession at large; and he felt quite sure that it would continue to do so. He was glad to see so many Members present, although he must admit that he could have wished there had been at least double that number. He begged to thank the Editor of THE VETERINARIAN for the able leader he had put forth; an article which reflected on him the greatest credit for the talent and ability he had displayed in it. He hoped that they would now soon see the Charter firmly established. The Council had had a most arduous year to go through, as was shewn in the Report, which was in the hands of the Members present; and he could bear testimony to their having been indefatigable in their exertions for the good of the profession at large. He would not go more fully into the proceedings of the past year, as they were contained in the Report, which would be read, and would occupy a considerable length of time in reading. The question of the Registration was one of very great importance; and in successfully carrying it out he felt bound to say, that Mr. William Arthur Cherry had used the

greatest exertions. The next subject to which he would draw the attention of the meeting was, the appointment of six members of the Council in lieu of those who go out. Of the six retiring members, he felt bound to say that four of those gentlemen had given their constant attendance, while the other two gentlemen had never been present. He would not detain them longer, but conclude by expressing a hope, that the gentlemen present would, in conducting the business of the meeting, one and all, in delivering their feelings, have a due regard to their own credit and character, and speak their sentiments in as mild language as possible.

Mr. Gabriel, the Secretary, then read the minutes of the previous meeting, which were signed by the Chairman.

Mr. Vines had listened to all that the President had said with the greatest pleasure. He, however, felt that it was no use bringing in a lot of mushroom gentlemen who had had no experience. They had now a Charter, and he hoped the profession generally would be benefitted by it. They had even yet no room of their own to meet in, as they ought, now that the College was of four years' standing: they had still nothing but the dark room in the tavern in which they were assembled, where the great body of the profession did not attend. He also understood that the Secretary received a salary of £50 a-year for his services, and that the Examiners received two guineas each for their services, and yet they had no funds. He condemned the use of printed balloting papers, and their being put forward like parish meeting papers. He, for one, would not vote for the names on the papers. He also felt that they were using the Royal Veterinary College too harshly. They ought to give and take, and not to speak against each other.

The Chairman said, the first business to be transacted was the election of the six members of the Council.

Mr. Withers and *Mr. Hunt* having been appointed Scrutators,

Mr. Draper said, he thought the two gentlemen who had never attended the meetings of the Council ought not, at any rate, to be longer continued members of that body.

The election was then proceeded with, and the balloting papers having been all received, the Scrutators commenced casting up the votes. At the conclusion of their labours,

The Chairman announced that the election had fallen on *Mr. Percivall*, whose number of votes were 36; *Mr. Robinson*, 34; *Mr. J. Turner*, 33; *Mr. A. Henderson*, 31; *Mr. Pritchard*, 25; *Mr. Peech*, 25; a result which was received with much cheering.

The Chairman then said the Secretary would read the Report of the Council.

Mr. Gabriel, the Secretary, commenced reading the Report, in

doing which he was assisted by Mr. W. A. Cherry, it being a lengthy document, occupying upwards of an hour in reading. It was received with considerable applause.

Mr. W. A. Cherry then laid before the Meeting a printed copy of the register of the members of the veterinary profession, and said that, although it was not a complete list, he could vouch that, as far as it went, it was a correct one, as no name had been inserted for which a voucher had not been received. Several persons who had been written to had not sent any replies: that, however, would now be obviated in future, a number of gentlemen in different parts of the country having consented to become Corresponding Members, by which means he did not doubt it would be much improved next year.

Mr. Burleigh, of Leicester, said he spoke the sentiments of the members of the profession residing in the midland counties, when he expressed his great approbation of the able stand which the Council had made against the opposition by which they had been assailed. He condemned that opposition to the Charter, because he considered that those who are making it would best consult the interest of the profession at large by allaying that opposition, and uniting together in one community of brotherhood. The present times, he would maintain, were not the times to divide, or to promote division; but rather ought the members of every profession to unite in brotherly union. With regard to cattle practice, the neglect of which had so properly been shewn in the Memorial sent in to Sir George Grey, he knew an instance, in which a gentleman, after applying to several members of the profession without being able to procure the slightest assistance from them, had been compelled at last to fall back upon the common cowleech, and this after the Royal Veterinary College of London had been established for upwards of fifty years. The want of knowledge of cattle practice was a serious reflection on the profession. He would contend that the Royal Veterinary College had neglected the country members. He would not detain the meeting longer than to observe that, in his opinion, and in the opinion of those he represented, the profession generally ought to wait patiently in order to see what will be the effect of the present charter, before they desire to obtain a new one.

Mr. Vines considered that the Council had in their Report gone too far in their charges and reflections against the Royal Veterinary College. That institution had been established more than fifty years, and in his (Mr. Vines') opinion, did not deserve them. Many of those present would not have been in the profession had it not been for the Royal Veterinary College. He, therefore, would contend, that the Council ought not to have drawn up the

Report so hastily ; and, in fact, ought not to have sent such a Memorial to the Secretary of State at all. It was a great pity there should be so much dissension amongst them ; and he would suggest to the Council that something ought to be done in order to bring the whole profession together.

It was then moved and seconded, " That the Report be received and adopted," and, no one rising to speak on either side,

The Chairman proceeded to put the motion to the meeting, when there appeared to be for the motion 24, against it 6.

The Chairman declared the motion carried, and the meeting broke up.

FOURTH ANNUAL REPORT OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS TO THE MEMBERS OF THE PROFESSION.

THE Fourth Annual Report which the Council have the honour of laying before the Members of the Royal College of Veterinary Surgeons, will vary but little in its general outlines from the one preceding it ; being limited to a detail of facts originating from causes and terminating in effects but too similar to those which its yet early infancy has been doomed to struggle with.

With respect to veterinary politics, it will, doubtless, be borne in mind, that, in the last Annual Report, was given a Memorial imperatively called for by a demand made at the Home Office for a new Charter of Incorporation by certain parties who expressed themselves aggrieved by, and dissatisfied with, the one under which we have the honour to act ; and the reply from the Home Office was added, acknowledging its receipt, and promising that, in the event of any further agitation in the matter, notice should be given to the Royal College of Veterinary Surgeons. In June last, in accordance with the courtesy and good faith which have characterized all the transactions of the Home Office, the following note was received by your President :—

Sir,

Whitehall, 26th June, 1847.

I AM directed by Secretary Sir George Grey to inform you, with reference to my letter of the 10th November, 1846, that he has received a petition from the Royal Veterinary College of London, and the Highland and Agricultural Society of Scotland, praying that a Charter may be granted to the Royal Veterinary College of London and Edinburgh, and that this petition is under Sir George Grey's consideration.

I am, Sir,

Your obedient servant,

S. M. PHILLIPS.

*Thos. Turner, Esq.,
President of the Royal College
of Veterinary Surgeons.*

Its receipt was acknowledged as follows :—

Sir, 311, *Regent-street*, July 1st, 1847.

I HAVE the honour to acknowledge the receipt of your letter of June 26th, announcing an application from the Royal Veterinary College, and the Highland and Agricultural Society of Scotland, praying that a Charter may be granted to the Royal Veterinary College of London and Edinburgh.

I have the honour to remain, Sir,
Your most obedient servant,
THOMAS TURNER,
President of the Royal College of
Veterinary Surgeons.

S. M. Phillips, Esq.

But as the announcement was merely that which, as a matter of course, had been anticipated, it was not considered necessary that any further immediate steps should be taken respecting it. As time passed on, however, without any further intelligence transpiring, several of the country members of the Council, whose opinions are always sure of commanding attention, became anxious for more recent information, and, in compliance with their wishes, the following application was made by your President :—

To the Right Honourable Sir George Grey, Bart., Her Majesty's Principal Secretary of State for the Home Department.

Sir George,—I HAD the honour, in July last, of acknowledging the receipt of a communication from Mr. S. M. Phillips, intimating that a Petition from the Governors of the Royal Veterinary College, and the Highland and Agricultural Society, was then under your consideration.

May I be permitted to beg the favour, in the name of the Council of the Royal College of Veterinary Surgeons, of a copy of that document, if not incompatible with the usual routine on such occasions ?

I have the honour to be,
Sir George,
Your most obedient servant,

311, *Regent-street*,
Sept. 10, 1847.

THOMAS TURNER,
President of the Royal College of
Veterinary Surgeons.

The reply was prompt and satisfactory.

Sir, Whitehall, 15th September, 1847.

I AM directed by Secretary Sir George Grey to acknowledge the receipt of your letter of the 10th instant, and to transmit to you the enclosed copy of the Petition of the Royal Veterinary College of London, and the Highland and Agricultural Society of Scotland, in pursuance of your request.

I am, Sir,

Thomas Turner, Esq.
President of the Royal College
of Veterinary Surgeons,
311, *Regent-street*.

Your obedient servant,
DENIS LE MARCHANT.

To the Right Honourable Sir George Grey, Bart., &c. &c. &c.

The Humble Petition of the President and Noblemen and Gentlemen, Governors of "the Royal Veterinary College of London," and the President and Directors of the "Highland and Agricultural Society of Scotland,"

[As published in *THE VETERINARIAN*, vol. xx, p. 616-620, to which the reader is referred.]

In this Petition, it will be observed, reference is made to the heads of a Charter also submitted for consideration; and, as it was obviously necessary to enable your Council to obtain a correct view of the measures taking against the body whose interests they were bound to protect that a knowledge of these heads of a Charter, &c., should be procured, a further appeal was made to Sir George Grey.

To the Right Honourable Sir George Grey, &c. &c.

Sir George,—I AM requested by the Council of the Royal College of Veterinary Surgeons to return their thanks for your prompt attention to their request for a copy of the Petition from the Royal Veterinary College of London, and the Highland and Agricultural Society of Scotland; and am directed further to trespass on your kindness in soliciting a copy of the heads of the Charter submitted for your consideration, which document they were not aware had been presented when I last had the honour of addressing you.

I have the honour to be,

Sir George,

Your most obedient servant,

THOMAS TURNER,

President of the Royal College of
Veterinary Surgeons.

311, *Regent-street*,
Oct. 8th, 1847.

The reply gives the acquiescence as prompt as it was courteous.

Sir,

Whitehall, 19th October, 1847.

I AM directed by Secretary Sir George Grey to acknowledge the receipt of your letter of the 8th instant; and to transmit to you herewith, agreeably to your request, a copy of the Charter referred to in the Petition of the Royal Veterinary College, and the Highland and Agricultural Society.

I am, Sir,

To Thomas Turner, Esq.,

Your obedient servant,

*President of the Royal College of Veterinary
Surgeons, 311, Regent-street.*

DENIS LE MARCHANT.

The heads of the Charter proved to be a very long and verbose document, its more important points being freely transposed from the Charter of the Royal College of Veterinary Surgeons, with others of a more complicated and *ex parte* nature rather incongruously dovetailed. The following is an abstract of its leading provisions :—

Abstract of the Charter applied for by the President and Governors of the Royal Veterinary College of London, and the President and Directors of the Highland and Agricultural Society of Scotland.

[Published in *THE VETERINARIAN* for March of the current year, vol. xxi, p. 117-122.]

Sufficient data for consideration having thus been obtained, a Committee, consisting of Messrs. T. W. Mayer, A. Cherry, W. Ernes, and E. Gabriel, was nominated to consider and prepare a reply to the same;—their Report, unanimously adopted by the Council, was as follows:—

[As published in *THE VETERINARIAN* for March of the current year, vol. xxi, p. 122-125.]

Ere, however, this reply had been transmitted to the Home Office, the following note was received:—

Sir, Whitehall, 8th of February, 1848.

I AM directed by Secretary Sir George Grey to request, with reference to the Petition of the Royal Veterinary College of London, and the Highland and Agricultural Society of Scotland (a copy of which was transmitted to you on the 15th of Sept., 1847), that you will inform the Council of the Royal College of Veterinary Surgeons that Sir George Grey is ready to receive any explanation or counter-statement which the Council may be desirous of making with respect to the allegations in the Petition, the petitioners having renewed their application for the Charter.

I am, Sir,

Thos. Turner, Esq., Your obedient servant,
President of the Royal College of Veterinary DENIS LE MARCHANT.
Surgeons, 311, Regent-street.

In consequence of which, the reply was immediately forwarded with the following note from the President:—

Sir, 311, Regent-street, 14th February, 1848.

I HAVE the honour of acknowledging the receipt of your letter of the 8th instant, and enclose the reply prepared by the Council to the leading points of the Petition and Charter lying at the Home Office. As, however, the application has been renewed, and as there are several points yet unanswered, the Council have the subject still under their serious deliberation, and are preparing a more detailed reply for Sir George Grey's consideration; or, should an explanation to yourself be more convenient, I will do myself the honour of waiting on you at any time you may appoint.

I have the honour to be,

Sir,

Your most obedient servant,

THOS. TURNER,
To Sir Denis Le Marchant, Bart., President of the Royal College
Home Office. of Veterinary Surgeons.

The President of the Royal College of Veterinary Surgeons, however, and its Council, were not likely to require a second

reminder from the Home Office to urge them to prompt measures, when difficulties were to be overcome or delays became dangerous. The Committee that had furnished the first portion of the reply was re-elected, with the addition of Mr. Mayhew; and a counter-report, which was unanimously adopted by the Council, was, without loss of time, dispatched with the following note to Sir G. Grey:—

To the Right Honourable Sir George Grey, &c.

Sir George,—I HAVE the honour of forwarding a more detailed reply from the Council of the Royal College of Veterinary Surgeons to the points contained in the petition for, and draft of, a Charter presented by the Governors of the Royal Veterinary College of London, in full confidence that it will be received with the consideration which the advancement of veterinary science, and the interests of the veterinary profession, may be deemed worthy to require.

I have the honour to be,

Sir George,

Your most obedient and humble servant,

THOMAS TURNER,

President of the Royal College
of Veterinary Surgeons.

311, Regent-street,
April 3, 1848.

To the Right Honourable Sir George Grey, Bart., Her Majesty's Principal Secretary of State for the Home Department, the Memorial of the Council of the Royal College of Veterinary Surgeons.

[As published in THE VETERINARIAN for May of the current year, vol. xxi, p. 237-250.]

The results of all this labour are, it is true, as yet but negative; still they are significant. No new grounds have been broken for a fresh Charter—no controversion of the statements given in by your Council has been attempted—no renewed application has been heard of—no new Charter has been granted.

A subject of scarcely secondary importance to the one we have been narrating, namely, the Registration of the Members of the body politic and corporate, has continued to receive the attention of the Council. The Registration Committee still continue their labours; and too much praise cannot be given to the indefatigable Honorary Secretary thereof, Mr. Arthur Cherry, by whom the whole of the details have been collected, and through whose continuous exertions alone, the result, as far as it goes, is solely to be attributed: their Second Report—the First having been given last year—is as follows:—

[The First Report will be found in THE VETERINARIAN, vol. xx, p. 270-273.]

[The Second Report is published in the March No. of THE VETERINARIAN for the present year, vol. xxi, p. 173-174.]

The appointment, under the sanction of the Council, of a number of Corresponding Members, is a measure which has produced the most valuable results; not only inasmuch as it has spread a very considerable *esprit de corps* among our country brethren, but as having produced also a considerable amount of local information and personal detail, which could only have been procured on the spot, and, even there, by those alone who were well versed in the matter, and had ability and inclination to investigate the actual state of affairs.

The Third and last, which has just been delivered, gives the result of their labours, and prepares you to receive the first List of the Members of the Royal College of Veterinary Surgeons, which is this day laid before you.

[The Third Report from the Registration Committee was published in our No. for last month, vol. xxi, p. 294-295.]

The veterinary profession is neither a very large nor a very influential body; others much larger and more influential have not deemed it unwise to seek the aid of rank, wealth, and science, to extend and embellish their achievements;—why should not we follow their example? Your Council, after a deliberate consideration of the subject, could see no reason to prevent it; and the following order in Council was passed:—

“That, for the purpose of further raising and extending the welfare and dignity of the veterinary profession, it is desirable that certain honorary appointments be created in connexion therewith; such appointments to comprise a Patron, twelve Vice-Patrons, and a proportionate number of Honorary Associates; the parties so elected not, however, to be deemed members of the body politic and corporate.”

It is to the aristocracy of the country we look for patronage—to the wealth of our princely merchants for remuneration and reward—to the aid of science to extend our utility—and to literature to record our improvements, and to herald forth the fact that we have not been idle in our day, nor fallen off in our attainments. Why, then, should not one and all be combined amongst us? Why should the genial influence of rank, wealth, and talent, be shunned by a professional body which despise concealment, even when by so doing their errors may be proclaimed, because they feel they have endeavoured to do their duty in that station of life in which their vocation places them? and which therefore court, without presumption on the one hand or sycophancy on the other, the inquiry, the investigation, and, after these, the friendly co-operation of those installed above and around them.

It does occasionally happen in your Council, that, when some individual on particular occasions exerts himself more than his

compeers, a due appreciation of his efforts is evinced by a vote of thanks; and, fortunately, this happens sufficiently often to render it unnecessary to bring every such instance before your notice. But when the gentleman so complimented is not only not a member of Council, but is not even a member of the profession, the fact cannot be too extensively promulgated: the instance referred to is that of Dr. McGregor, of Glasgow, Secretary to the portion of the Board of Examiners acting for Scotland. This gentleman has not only taken his full share in the labours of the Board, but has also most handsomely and efficiently performed the official duties of the Secretaryship without fee or reward, and a warm and unanimous vote of thanks from the Council proved their sense of his valuable services.

The year 1848 still finds us in the mere possession for the hour of the hall of a public establishment, the entrance to which is not governed by the requirements of general science and professional knowledge, but is indiscriminately open to all who can produce a golden key. We may, indeed, dream of "marble halls," but, in sad reality, we have not even a lath-and-plaster tenement; a habitation, however quiet and unpretending in character, however plain and humble in pretension as would suffice, as compared to the abodes of the elder branches of the healing art, Medicine and Surgery, is a boon too great to be accorded to the Royal College of Veterinary Surgeons. How far different the case might have been had friendly feeling and goodwill existed among us, there are some who could give a shrewd guess; for, where the spirit of conciliation exists individually, and the only rivalry permitted is that of professional excellence, the yearning for that communion of kindred studies, and the desire for professional intercourse, so conducive to the advancement of science, is sure to be evidenced; nor would the spot long be found wanting whereon the right hand of fellowship might be held out frankly and cordially on the one side, and received with sincerity and good faith on the other. Selfish, solitary, and misanthropic, must be the musings of those who, like the evil genii of old would scatter the seeds of distrust and dissension through the bond created and chartered by royal beneficence, to combine all in one cosmopolite community; but still, *nil desperandum*, the good time will come.

If, however, there is no habitation devoted to the use of the Royal College of Veterinary Surgeons, do not for a moment let it be imagined that it is because there are no funds, for that would be a very annoying mistake, when we have at this moment, from a source of not very many more than a thousand members, an income,

derived from annual subscriptions alone, making us "passing rich on £40 a-year." The sum, it is true, is not so large as it might, and, were we an united and co-operating body, it most assuredly would be ; but still the contribution demonstrates a chivalrous and liberal spirit among the few, which, though it may well make the many blush while reminding them that the main object can only be carried out by the co-operation of the body at large, still rallies round the good cause, determined that the treasury, though low, shall not become exhausted ; but that, even after all just demands shall have been met, enough shall there be found to form a nucleus on which, when the happy day arrives, the combined efforts of the profession shall produce an overflowing exchequer. Nor, while these feelings predominate, has the invaluable maxim of "be just before you are generous," been lost sight of ; for, by an unanimous vote in Council, £100 from the small balance in hand, has, during the past year, been devoted to the farther liquidation of your debt.

In conclusion your Council would remark, they have, as far as possible, pursued the even tenor of their way, neither beguiled by undue hopes or aspirations on the one hand, nor deterred by wars or rumours of wars on the other. They have been accused, but no charges have been proved against them ; assailed, but no errors have been recorded ; threatened, but no results have, by the opposing parties, been arrived at : apprehensions, therefore, that might have existed, either as to the influence and success of their opponents, or of their own inability efficiently to perform the onerous duties devolving on them, are fast disappearing. Strong in the integrity of their purpose, supported by your confidence, appreciated by the public, and listened to with courtesy and impartiality by the advisers of the Sovereign who created us, they will steadily pursue their onward progress for the advancement of veterinary science, and the dignity and well-doing of the profession over which, by your unbiassed voices, they have the high honour to preside.

E. N. GABRIEL,
Secretary.

FINANCE REPORT OF THE ROYAL COLLEGE OF VETERINARY SURGEONS, AS PASSED IN COUNCIL,

From 4th May 1847, to 1st May 1848.

RECEIPTS.

To Balance in hand on 4th May 1847	-	-	-	£	s.	d.
“ Fees for Examinations	-	-	-	-	136	18 11
“ Annual Subscriptions, as under, from Messrs. A. S. Rogers	-	-	-	-	355	18 0
“ J. Dunsford, North Row	-	-	1	1	0	0
“ Wm. Percival, 1st Life Guards	-	-	1	1	0	0
“ Alfred Walker, Rugby	-	-	1	1	0	0
“ E. Turner, Reigate	-	-	1	1	0	0
“ G. Baker, ditto	-	-	1	1	0	0
“ W. Holliday, Luton	-	-	0	10	0	0
“ Joseph Sewall, Strand	-	-	1	1	0	0
“ E. N. Gabriel, London	-	-	1	1	0	0
“ W. Ernes, London	-	-	1	1	0	0
“ ———, Peckh, York	-	-	1	1	0	0
“ Sylvester, St. Albans	-	-	1	1	0	0
“ Wm. Field, London	-	-	1	1	0	0
“ Thos. Turner, President	-	-	1	1	0	0
“ ———, Goodwin, Pimlico	-	-	1	1	0	0
“ Henderson and Son, Park Lane	-	-	2	2	0	0
“ ———, Babby, London	-	-	1	1	0	0
“ F. King, Stanmore	-	-	1	1	0	0
“ ———, Marshall, London	-	-	1	1	0	0
“ Jas. Turner, Regent Street	-	-	1	1	0	0
“ ———, Wilkinson, 2d Life Guards	-	-	1	1	0	0
“ ———, Nice, London (2 years)	-	-	2	2	0	0
“ ———, Mayhew, London	-	-	1	1	0	0
“ John Whitney, Westbury-upon-Trim	-	-	0	10	0	0
“ S. H. Withers, Bristol	-	-	1	1	0	0
“ J. Kent, ditto	-	-	1	1	0	0
“ N. P. Leigh, ditto	-	-	0	10	0	0
“ Jos. Lucas, Lutterworth	-	-	1	1	0	0
“ John Batchelor, Grantiam	-	-	1	1	0	0
“ Wm. Bury, Leicester	-	-	1	1	0	0
“ Thos. Godwin, Birmingham	-	-	1	1	0	0
“ John Carlless, Stafford	-	-	0	10	0	0
“ D. Baker, Chesham	-	-	1	1	0	0
“ Rob. Bowles, Abergavenny	-	-	1	1	0	0
“ Special examination, “Mr. Webb”	-	-	-	35	0	0
	-	-	-	21	0	0
	-	-	-	£548	16	11

“Liabilities” on 1st October 1847
Interest on ditto, from 1st October 1847, to 1st May 1848

Balance in hand

EXPENDITURE.

By Rooms for General Meetings, Councils, and Committees	-	-	-	£	s.	d.
“ Carriage of box to Edinburgh	-	-	-	-	0	7 0
“ Amount paid Professor Dick for use of Hall	-	-	-	-	5	0 0
“ Fees to Board of Examiners	-	-	-	-	118	0 0
“ Advertisement and printing accounts	-	-	-	-	21	16 9
“ Copying Memorial	-	-	-	-	0	17 4
“ Engraving Memorial	-	-	-	-	1	0 8
“ Stationery, stamps, envelopes, postage, &c., as per Secretary's account	-	-	-	-	7	11 8
“ Allowance to Secretary	-	-	-	-	50	0 0
“ Account for Seal and engraving of same	-	-	-	-	2	0 0
“ Amount paid Mr. W. Field, being his share of £100 in part payment of loan, viz. —	-	-	-	-	£14	16 11½
On account of principal	-	-	-	-	3	6 8
One year's interest on £66.13s.4d. due 1st Oct. 1847	-	-	-	-	-	-
“ Mr. Gabriel, as above	-	-	-	-	18	3 7½
“ Mr. King, as above	-	-	-	-	18	3 7½
“ Mr. Mayer, as above	-	-	-	-	18	3 7½
“ Mr. Turner, as above	-	-	-	-	18	3 7½
“ Mr. Henderson, one year's interest on £33.5s.8d. due 1st Oct. 1847	-	-	-	-	£1	13 4½
On account of principal	-	-	-	-	7	8 6

9 1 10½

By Cash in Bankers' hands

£548 16 11

£ s. d.

285 0 0

8 6 3

293 6 3

226 15 0

£66 11 3

WILLIAM FIELD,

Treasurer.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

[Continued from page 257.]

OTHER JOINT LAMENESSES.

WE have seen that two joints in particular are subject to disease in horses, viz. the *navicular joint* in the fore limb, and the *hock joint* in the hind limb. Other joints of the limbs have, on occasions, proved the seats of lameness, but these two are its ordinary situations, the reasons for which have been before detailed.

Formerly, among the farriers of old, "the round bone," by which is indicated the *hip joint*, was supposed to be a frequent seat of ailments; and it was a common practice with those who held this opinion to fire the skin covering the round bone, the part they took for such bone being *the great trochanter of the os femoris*, which, in fact, is the nearest point, externally, to the hip joint. The firing was commonly made to imitate the wheel of a carriage; and some years ago, it was by no means uncommon to meet with horses having this mark upon their hip; though, at the present day, the occurrence is comparatively rare. This will not appear strange when the reader comes to be informed that numbers of horses whose lamenesses have really been in the *hock* have been pronounced "lame in the round bone." The advances made in veterinary science have satisfactorily shewn that the farriers' opinion was, for the most part, founded in error; the halting action which they considered as denoting hip-lameness, more critical observation, combined with *post-mortem* results, has demonstrated to have its origin in disease of hock, for the most part, indeed, in *spavin*. Spavin, as we have seen, is a fruitful source of lameness behind, frequently insidious in its rise and progress, sometimes difficult of detection, occasionally incapable of demonstration; no wonder, therefore, that it should so often lead the unwary and inexperienced into error.



But it is an easier task to expose palpable error of this kind than it is to define the limits of articular disease—to say what joints *commonly* are affected with lameness, and what rarely or never are—than to specify the joints really obnoxious to disease, and those that have never been known or observed to be diseased. This is a subject on which information is a good deal needed; meanwhile, we must content ourselves with what we find on record, and with stating such results as have been afforded by our own experience.

HIP-JOINT (OR ROUND BONE) LAMENESS.

Eight years ago—in 1840—Mr. T. W. Mayer, veterinary surgeon, at Newcastle-under-Lyne, published a paper in THE VETERINARIAN on this subject, which had the two-fold effect of rectifying the erroneous opinions formerly entertained respecting its prevalence, and of warning veterinarians of falling into the opposite error of regarding it as an occurrence of extreme rarity; at the same time it has put us in possession of a good amount of useful information, of which it is our intention to avail ourselves on the present occasion.

“So strong of late years,” says Mr. Mayer, “has been the tide of prejudice against the possibility of any lameness occurring in this joint, that we occasionally overlook it, and attribute the grounds of the mischief as resident in the hock: nor can we wonder at this, when, in the slighter shades of lameness in a hinder extremity, the effect upon progression is so very similar.”

Our own observation would lead us to the belief that the hip-joint of the horse is rarely found in a state of derangement without there being some sprain, contusion, slip-up, fall, or other injury connected with the ailment; and then we, for our own part, think that it is a common seat of the lameness accruing from the injury, in consequence of its being a part very liable under falls, contusions, and certain kinds of sprains, to receive injury. At the same time, we must admit that too often, in cases of supposed hip-joint lameness, much of the medical opinion is founded in conjecture, there being, as Mr. Mayer has justly observed, at times a good deal of similarity in the halting produced by disease or injury of hip and hock, while in the case of the former no external sign shews itself whereby we can, either to our own satisfaction or that of our employer, demonstrate the nature of the case. At other times, however, and in the generality of the cases of external injury, where the attention of the practitioner comes to be directed to the hip, a perceptible difference in the halting action is observable. There is a *hop* and a *catch* in the movement of the lame hind limb which, to the practised eye, pretty clearly shews the lameness to be in the hip: the hock, it being remarked, flexing itself with its wonted freedom.

Thus, the hip-joint, as Mr. Mayer has informed us, “is not only subject, like other joints, to strains of its connecting and capsular ligaments, but likewise to synovial inflammation from accidental injuries, &c., consequent ulceration of its cartilaginous surface, and extensive formation of matter, which, ulcerating its way out, may lie a long time embedded under the mass of muscles surrounding the joint before it makes its way to the surface.”

"Foals," says Mr. Mayer, "and calves are occasionally subject to *scrofulous* inflammation of the hip-joint." In some cases of this kind he has "seen large formations of matter occur upon the sacro-sciatic ligament without being connected with the hip-joint."—"In others, the formation of matter takes place within the joint."

But "in full-grown animals," continues Mr. Mayer, "we rarely meet with *scrofulous* inflammation." In them, "in consequence of strains, or of being thrown down, particularly in carts and carriages, synovial inflammation is set up; and unless very vigorous treatment is early adopted, it either terminates in perpetual lameness from ankylosis, &c., or in the formation of matter, consequent ulceration, and, ultimately, loss of life."

The following narrative related comes instructive to us here. A cart-horse, it was strongly suspected by its owner, had been thrown down in a cart. Mr. Mayer did not see the case for some months afterwards. The animal looked emaciated from pain and irritation. The affected quarter had much wasted, and as the animal moved along, by the application of the hand and ear, could every now and then be perceived a sensation and sound as though "the head of the femur chucked in and out of the acetabulum." Mr. Mayer was of opinion that there was either *a dislocation of the hip*, or *a fracture of the neck of the thigh bone*, and that therefore the animal had better be destroyed. Post-mortem examination disclosed a very large collection of pus in and around the hip-joint, extending as high as the sacro-sciatic ligament. The round ligament was ulcerated through its attachments, the cartilage lining the acetabulum and clothing the head of the femur absorbed, and the matter had made its way through the capsular ligament, which accounted for the peculiar sensation and sound afforded by progression. It seemed remarkable, the pus had not made its way to the surface.

THE TREATMENT OF HIP-JOINT LAMENESS may turn out either a very trivial or a very formidable affair. Occurring, as it usually does, from injury of some sort, continual fomentation of the quarter, repose, and brisk cathartic medicine, will very commonly, give sufficient time, accomplish the cure. And the most effectual fomentation for such a part as the hip is a continual succession of woollen cloths, soaked in water as hot as the hand can be borne in it. A large covering of spongio-piline, with another soaking in the hot water ready to succeed it, would prove most effective. The fomentations may be followed by refrigerent or discutient lotions; though from the latter not much benefit need be expected. Any effective treatment, with a view of *discussing* or counteracting inflammatory action, must now consist in counter-irritation—in blisters or setons, or a rowel in the thigh, than which, Mr. Mayer's

practice has taught him, nothing in such cases proves more beneficial. Although it may be proper to keep the lame animal for a time tied up in his stall with two ropes, so that he cannot lie down, when the inflammatory action comes to be on the decline a loose box is certainly the preferable apartment for our patient, and in some cases, especially during convalescence, a little walking exercise is recommendable.

ELBOW-JOINT LAMENESS.

Had it not been for a luckless wight of a horse of my own, my pen must have remained silent on this subject. The case is complete in every stage of its history, from its very insidious and dubious beginning down to its unfortunate and fatal termination. To me, all the way through, it proved a mystery ; to others it may answer the purpose of a beacon in the event of their ever encountering a *rara avis* of the sort.

The subject of the disease was a chestnut gelding, I got in the year 1843, in a swap with Mr. Sewell, dealer in horses, Pimlico. He was then rising five years old, and looked like a weight-carrying hunter and useful harness horse, being in appearance little more than half bred. He was well shaped everywhere save in his fore legs ; and they were not deficient in power, but were strikingly calf-kneed, with toes inclined outward, and action dishing and slovenly, the consequence of which was, that, in his usual careless jog trot, he made frequent stumbles through hitting his toe, although when excited or put into a gallop his action improved greatly, so much so indeed in the latter pace that it was in the eye of a sportsman undeniable. Though I used him mostly in harness, I occasionally rode him, and paid dearly enough for it by his having thrice fallen upon his knees with me. In neither fall, however, did he hurt himself ; only on one occasion, indeed, did he graze the hair upon his knees. Still, I repeat, he was an excellent galloper, and turned out a capital jumper, and more than once acquitted himself very creditably with the Queen's hounds.

Soon after I purchased him—in the spring of 1843—he took the catarrhal influenza prevalent about that time, but had it favourably, and speedily recovered ; since which, to the summer of 1845, he ailed nothing, but regularly did his work, which was extremely moderate.

The latter end of June 1845 he took the influenza again, and though the epidemic of that year was of a severe and fatal character, he had it very lightly ; the only question being, as will arise in the sequel, whether his system did or did not in consequence of the attack, notwithstanding it was a mild one, imbibe

the arthritic or rheumatic diathesis, which along with the influenza so much prevailed. Albeit, he recovered about the middle of July from the attack, and went to work again, appearing completely restored to health and strength and spirits.

A month afterwards—the middle of August—while driving him, I fancied he went lame in the off fore leg. I at first thought his lameness might arise from some temporary cause. I looked for a stone in his foot, but found none. I continued my drive notwithstanding, and when I returned home I had his shoe taken off. Still I found nothing to account for his slight and transitory lameness: I say *transitory*, for the following day I drove him again, and then he appeared better—hardly lame, in fact, at all. I continued working him—unwisely giving way to a vulgar notion that, in his somewhat dubious condition, he “might *work* sound”—for a few days longer; when I became ashamed of myself for driving a lame horse, and resolved on submitting him to some treatment likely to prove more effective than any thing which had hitherto been tried. Considering his lameness to be in his foot, blood was taken from the toe, and that followed up by a sweating blister upon the pastern. This treatment occupied the month of September. No relief resulting from it, I shewed him in the beginning of October to Mr. Arthur Cherry, whose opinion was that the *knee* was the seat of his lameness. Accordingly, treatment was directed to that locality, with, however, no better success than the former. On the 1st November both his fetlock joints were blistered, and he was, when fit, turned into straw-yard. There he remained until the 15th December, when he was taken up again into the stable, and, strange to say, in a *lamer* condition than he had ever yet been; and was thought now to be lame in the *near* as well as in the off fore limb. At all this I was so much surprised, and at the same time so disheartened, that I felt at a loss to account for his lameness, or what steps to take by way of remedy for it. In this state of mind I was, I may say, driven to attack the *shoulder*, every other joint likely to harbour disease having been already tested or treated for it. I therefore, as a sort of hit-or-miss treatment, had a large quantity of blood abstracted from the plat vein, and an ample blister applied around the off shoulder joint; cathartic medicine being at the same time given, as on former occasions. After this was done, instead of being allowed any motion on the limb, he was kept tied up in a stall in a state of absolute rest and quiet.

January came and passed, February came, still no relief; on the contrary, he had, under all the treatment described, become gradually lamer and lamer; insomuch that now, at the latter end of February, he was going, after all this rest, actually lamer than I

had ever seen him go before. Several of my veterinary friends had the kindness, at my request, to look at him and examine him, after hearing my account of his case. Two thought he was lame in the shoulder, another in the foot, a third in the spine; all, however, agreeing that his case was a hopeless one, although, in consideration of his age and undisturbed good health, inclined to the opinion that he should not be given up without further experiment: since pure matter of experiment had his case now become.

The time is now arrived for me to enter into a more particular account of the symptoms his lameness presented, and particularly for the three or four weeks antecedently to his being destroyed. During the early period there was nothing to strike notice in his manner of projecting or putting down his lame limb, save that he evidently did all he could in action to throw the weight of his body, as it appeared to us, upon the *heel* of the foot; so that I more than once suspected chronic laminitis, and had on that supposition inserted a seton through the frog*. When he had become lamer, and was consequently more unwilling still to impose weight upon the lame limb, he evinced a sort of *dragging of the limb after him* in his going; which symptom it was, combined with an increased manifestation of it in his side movements, that disposed us to think his case was one of shoulder lameness. By the time, however, that he shewed lameness in *both* fore legs, and particularly when he became, as he had latterly become, quite a cripple, he manifested a remarkable *crouching* sort of action, dreading almost to move his fore limbs forward, and manifesting such exquisite soreness and pain when compelled to move on, that, while he was making as short steps as he could, he was doing his utmost to keep his body back and advance his hind limbs to receive its weight, to prevent any of it, or as little as possible, falling upon his fore limbs. In short, his posture and gait altogether were very like that of acute founder; so like indeed, that, perhaps, one might not be able to make a distinction between the two diseases, were it not that in founder the feet would shew the nature of the disease; and that in elbow-joint disease, although the animal manifested all this pain and dread of stepping, yet, when the whip was applied, and he found himself obliged to go, did he plainly shew that his fear arose purely from the *pain* of the moment, and not from any cause of absolute *inability* to tread; and, further, that the pain was not evinced at the moment of *putting down* the foot, as in founder, but at the time when the body was required to be advanced by the hind *upon* the fore limbs; at the moment, in fact, that he was called

* In the performance of this operation he plunged and fell, and, as I afterwards thought, hurt himself; though, from the sequel, I am satisfied no hurt took place.

on during action to throw the slightest weight upon the columns of bones, which he no sooner had done than his body shrunk back upon the hind quarters: in fact, it was evidently the effort to throw the weight upon the muscles of the shoulder instead of upon the bony column that occasioned this peculiar crouching gait. And every now and then, while he was being compelled to walk, would he, at the moment the weight came upon his fore limbs, crouch down to that degree, that lookers-on cried out he would "fall;" on no occasion, however, did he fall, but always saved himself by shrugging his body back upon his haunches. Reduced as he was to a state of crippleness to disable him even from walking about to get his own living at pasture, and evidently in exquisite pain every time he put forward his fore limbs in action, still it was not without both reluctance and regret, that, in the month of March 1845, I came to the resolution to have an end put to sufferings which every means we had made trial of had signally failed either to arrest or relieve.

Post-mortem Account.

THE ELBOW JOINTS proved the seats of disease. The inferior or broader half of the articulatory surface of the ulna presented a patch of ulceration, of the shape of a square whose sides measured about an inch each. The transverse portion of the articulatory surface of the radius, which naturally is an eminence, had become a fissure of ulceration of about a quarter of an inch in breadth at its widest, which was its posterior part: this ulceration extended but little more than half way across the surface, the portion of surface in front of it being sound. There was likewise a patch of ulceration in the interval between the condyles of the humerus, of a triangular shape, but which, in that situation, would not be opposed, either in action or at rest, to the ulceration upon the ulna. There was a patch of discolouration upon the front of the outer condyle, a seeming precursory to ulceration. From the surface of the ulcer upon the olecranon there were granulations springing up, which, it is to be believed, would in the course of time have turned osseous, and formed the nucleus for an anchylosis of the joint. In this instance, however, there existed no disease whatever of the periosteal or ligamentary tissues outside the joint, though I believe that would speedily have supervened upon the morbid condition afore described.

At no period of the duration of time the case was under treatment—seven months—was any satisfactory opinion given of the lameness, or the seat to it. The lameness came on very gradually,

in a manner imperceptibly, and fluctuated in intensity, being sometimes more evident than at others. It followed no hard day's work or known injury. And it increased, though tardily, by degrees from first to last, and in the face of all kinds of treatment (to parts not affected), until at length it became intolerable. And so mysterious was its nature all the way through the case, that nobody, by the merest conjecture, ever hit upon its seat. And yet, when its seat and nature came to be developed and considered, the symptoms appeared such as might have indicated it; and, moreover, inclined to the belief that there possibly might have been some connecting pathological link between it and the attack of influenza. One reason for so thinking was, that the influenzal attack happened in July, the lameness in August; another, that the influenza of that year had shewn a remarkable predisposition consequent upon it to such translations; though against this opinion militated the absence of bursal swelling outside the affected joints, and of any deposit inside. After all, the case is not stripped altogether of its mystic vestment. Nevertheless, it is likely to prove so far useful to us, that, should we ever meet with a similar one, although we may be equally at a loss for a remedy for it, we may at least be in a situation to offer some satisfactory diagnosis of its nature.

UNNATURAL PRESENTATION IN A COW.

By Mr. AITCHISON, Shotley Bridge, Durham.

Sir,—If you think the following case will be interesting to the readers of *THE VETERINARIAN*, it is at your service.

ABOUT four o'clock in the afternoon of the 15th of March, I was called to see a two-year-old heifer, that, as I was told, had been calving since morning. Upon examination, I found the fœtus lying with its hind quarter towards the mouth of the uterus, and the tail protruding into the vagina. I immediately attempted to turn the fœtus into its natural position: finding this, however, impossible, I tried to get hold of the hind feet, but this also failed, in consequence of their lying so far forward under the animal. I then proceeded to fasten a rope round the loins, with the intention of dragging the fœtus away in this manner; but I soon found, from the largeness of the fœtus, that nothing but embryotomy

would save the life of the mother. Accordingly, I introduced my parturition clams, and, fastening them in the posterior part of the pelvis, carefully introducing a probe-pointed bistoury, I divided the lumbar vertebræ, and, telling the assistant to pull the rope which was attached to the clams, we got away one hind leg and the pelvis. My next step was to evacuate the abdomen of its viscera, and by forcing my hand through the diaphragm I drew away the contents of the thorax; then, fixing the clams in the anterior part of the dorsal vertebræ, I got away the greatest part of the carcass. I then introduced my hand, and, seizing one of the fore legs, I managed to turn it into a natural position, by attaching a rope to each fore leg, and, by fixing the clams on each side of the head, I extracted the remaining part of the fœtus.

The fœtus appeared to have been dead some days, and the mouth contained four incisor teeth in the lower jaw, and three molars on each side, perfectly developed. But it had only one hind leg, and an unusually short tail. I was quite certain that the other leg had not been left in the uterus, and could not account for the singular *lusus naturæ*, unless it was the effect of a disease under which the mother had been labouring for four or five months previous to my seeing her, and which had deprived her of one fore and two hind feet, taking them off at the fetlock joint: about two-thirds of the tail, and nearly all the off ear, were also gone, and the animal was in a very unhealthy state.

MR. CHERRY IN REPLY TO MR. WHITTLE.

To the Editor of "The Veterinarian."

Sir,—I CANNOT but express my regret that a letter so entirely out of place should have appeared in the last number of your Journal, as that bearing the signature of "W. Whittle." What may be its object or its point I cannot clearly understand, unless it be that the writer has consented to allow his name to be used to give utterance to dull hacknied phrases which have long ceased to have any meaning; for dull of comprehension must I be, after being used to the sound of every tinkling bell for more than twenty years, not to be able to distinguish the ring of the metal, cracked though it be, whatever may be the clapper that elicits the sound.

To Mr. Whittle, had he thought proper to have addressed me with common courtesy, I would have cheerfully given any and every information that he might seek; but I can assure him that I am not to be trepanned into a discussion with *one* apparently, though in reality with others, who, incapable of fighting their own battles, seek for others to do so for them: it is an old trick. I never fight by proxy. I have never yet been tempted to express any thing that I have not been able to prove; but poor, indeed, must a man's capability be, who loses himself at the vague report or blustering sound of a popinjay.

Mr. Whittle tells you, that my "letter is but an echo of Mr. Mayhew's remarks." Of Mr. Mayhew's letter or remarks I knew nothing until, in common with your numerous readers, I saw it in *THE VETERINARIAN*. It may be a coincidence that they should have appeared in juxta-position, but it is nothing more. Twenty, fifty, or a hundred, that I know, would have given utterance to the same ideas; every man, with the slightest knowledge of the laws which govern society, would arrive at the same conclusion: it is an inevitable result.

That Mr. Whittle has thought a self-appointed Board of equal value with one legally established, is his own affair, and with which I have nothing to do. Experience will teach him that he has taken a false step. As a man takes his position, so must he bide the consequences.

Mr. Whittle is a young man, I doubt not with some ability; but his knowledge is very scanty, either of the laws which regulate society in an established community, or of the history of the veterinary profession. He puts, what I have no doubt he considers an unanswerable point, Why did not the Registrar-general publish "an accredited list of members?" For the simplest of all reasons,—namely, that veterinary surgeons were a body *unrecognised*; they were only farriers, cow-leeches, or were placed among the host of nameless occupations. This one fact will, without any comment, shew the utter valuelessness of the *school certificates or diplomas*, though such had been in existence for fifty years at the time of the last census. Such will not be the case when the next census comes to be taken, but which event will not happen before the year 1851; by which time Mr. Whittle will, in all probability, have seen the error of his ways, and have become, should it not be placed beyond his power, a member of the corporate body.

Like the fox and the grapes, Mr. Whittle wants to know what is the value of the registration. It can be of no consequence to one who holds it so cheap; but he further tells you his belief, that most others think as lightly both of the value of registration, or of

the benefits to be derived from the Charter of Incorporation. I shall not combat his ideas, but shall only say, that, out of about twelve hundred known members of the veterinary profession, *eight hundred* have thought proper to "*register*," and at least two-thirds of the known old established practitioners have done so under their own hands. So much for fact *versus* bombast.

There are some other queries and objections, which are not worthy of especial notice; some refute themselves, others will be practically answered at the fitting time: and as for the aspersion of the gentlemen who compose the Board of Examination—two of whom, however, are in the list of the self-appointed Board—it is a wanton insult, while the panegyric on the latter is fulsome in the extreme. Though I may not be residing in Edinburgh, I probably know more of *all* the parties than Mr. Whittle, and certainly do know better how to appreciate them. Enough of Mr. Whittle and his letter. I have done with him: he may say or do whatever pleaseth him; to me it passeth as the

"Idle wind, which I regard not."

But a word to those who may not be quite so wise as Mr. Whittle, and who will take advice not as gall, but as it is meant, in kindness.

A diploma from a chartered body will not give a man a business or a fortune, but it gives a point from whence he can start with advantage. He does not enter on life as a mere adventurer; he can say boldly that he has paid such a degree of attention to the pursuit by which he hopes to live, that it has qualified him to appear before those who have been appointed for the purpose of testing his fitness; and there is the proof of his having passed the ordeal, by the possession of his diploma. The public never look at the men who may compose individually any public board, but they *do look* to the competency of the power which constituted them. Men *tolerate* private acts and opinions, but they respect and obey the acts of the legislature.

It is this therefore that constitutes the great value of all diplomas, whether of law, physic, or divinity; it is this starting from a known and recognised point, which enables a man to proceed favourably, and *cæteris paribus*, gives immense superiority over another not so qualified; but after the start has been made, success depends on individual capacity, rectitude, attention, and knowledge of the art or calling.

No public appointments can be held without proper qualification: even in the Excise—a sort of employment into which any or everybody may enter—a certain time has to be passed in in-

struction before any trust is reposed : in the Customs the same. We have precedents in our own profession *ad libitum* ; but enough. No one but an ignoramus or a fool could for a moment think otherwise.

I am, Sir,

Your obedient servant.

ARTHUR CHERRY.

May 3, 1848.

RUPTURE OF THE MESENTERY AND STRANGULATION OF INTESTINE.

By JOHN HAWTHORN, *M.R.C.V.S.*, *Kettering*.

To the Editor of "The Veterinarian."

Sir,—HAVING had lately a case of not common occurrence, and not having seen a record of such a disease in any veterinary publication, I thought it, perhaps, might have interest enough to be inserted in your valuable Journal.

The disease I should call rupture of the mesentery and consequent strangulation of the intestines. It is partly similar in its symptoms and the operation for cure to strangulation of the intestines over the spermatic cord, commonly called "gut-tie."

In the mesenteric strangulation the symptoms are slighter ; there is not so much derangement of health, not so much striking of the belly with the hind legs, and not so much stretching of the body and sinking of the loins after rising from lair, as in "gut-tie." There is also, for the first two or three days, more fæces passed (although the quantity is but small), and there is not so much slimy mucus in the rectum ; and when operated on, the intestine does not hang so completely like a sheet over a line as in the "gut-tie" strangulation.

I have had a good many cases of "gut-tie," and most of them successful ones ; but have had only three cases like the one now described, all of which recovered. But it was rather singular that I saw a fourth case for the first and only time on the same day as the following operation was performed. The animal had been neglected, and was sinking fast. I opened it for satisfaction, but found the intestines gangrenous and intolerably fœtid, with a quantity of purulent red water in the abdomen. Although I could feel the strangulation, it was useless to do any thing, and the animal was killed. All these cases were males, of the Durham breed,

like those of "gut-tie." I have never seen it in a female; but in "gut-tie" the animals, in almost every case, have been Irish.

In this instance the steer was taken ill on the 17th of March, with loss of appetite and apparent costiveness, now and then striking his belly with his hind feet, and sometimes, but not often, stretching himself after getting up, and sinking his back a little.

Purgatives and enemas were given to the utmost extent until the 23d, when it was evident that medicine was of no use; and although I felt certain he was not "gut-tied," in the common sense of the word, yet it was imperative to operate. He had lost all pain, had become weaker, had no appetite, and passed no fæces.

I know some veterinary surgeons cast the animal for the operation; but I prefer doing it when standing, to avoid the danger of the intestines escaping in the struggles through the incision, which must be made about five inches long. On opening this patient it was clear it was not "gut-tie;" but on examining amongst the intestines I found a cord with what felt like a knotted mass of intestines over it, in the middle of the abdomen. The cord was about as thick as a goose-quill, and I thought I felt the lacerated mesentery.

These circumstances reminded me of my two former cases, and, of course, I resolved to cut the cord, but with little hope of saving the animal, for there was a great quantity of fluid among the intestines of a light pinky hue, and of which I ladled out a good deal, by pressing the back of my hand upon the intestines, and allowing the hollow of my hand to fill with it. I could feel one intestine very much thickened, like a piece of velvet, as thick as the lappel of my coat; and this circumstance, connected with the quantity of serous fluid, made me express a very unfavourable prognosis. However, the cord was cut, and the owner suggested that the steer should be laid on his back "to get the water out." I thought this desirable; and, after sewing up the incision with interrupted sutures within an inch to prevent the escape of intestine, he was thrown, and turned on his back, and the fluid drained off. The incision being closed, we loosed him, and he rose and appeared as well as before.

In about an hour and a half he had a copious discharge of fæces, and ate some hay. He was better the two next days, with regular evacuations, and fed well; but on the 26th he was not so well, fed less, and appeared costive. I attributed this to his having eaten too much hay, and to the state of the thickened intestine, and gave a mild dose of physic, and wished him to be kept two or three days on oil cake, gruel, and bran mashes, with very little hay. This was done; and from that time there was no further

trouble, either with his health or the wound. The latter soon healed, and the steer is now well.

If any of my brethren have met with similar cases, I should like to see their remarks in your Journal, as they might be the means of saving some animals which are thought to be labouring under constipation only; for at first the resemblance to "gut-tie" is far from complete, and after two or three days is often very much less so.

I am, Sir,

With great respect,

Your's, truly.

26th April, 1848.

TRANSVERSE OPERATION OF NEUROTOMY.

By Mr. WEBB, London.

Sir,—IN compliance with your request, I beg to state that I have practised the nerve operation, transversely, below the fetlock in cases of ringbone, ossified cartilages, &c., and consider the nerve quite as conveniently got at as though made horizontally. After I have operated on both sides of the leg I bandage with flannel, keeping it wet with cold water for a week or ten days. By that time the wound is healed, and I have seldom occasion to use caustic to keep the granulations back.

I am, Sir,

Your obedient Servant.

P.S.—We thank Mr. Webb for his attention to our inquiries.—ED. VET.

COMA IN THE HORSE,

PRODUCED BY THE PRESENCE OF TWO TUMOURS AND A LARGE
QUANTITY OF SERUM IN THE LATERAL VENTRICLES
OF THE BRAIN.

By P. LEACH, M.R.C.V.S., Yeovil.

Sir,—WITH this I forward by post a tumour, which I yesterday took from the left lateral ventricle of the brain of a horse: should the history of the case be deemed worthy of a place in your valuable Journal it is at your service, and I shall thus for the first time

(but I hope not the last) become a subscriber to its pages. I have also one or two cases more, but not of the same description, which I hope to send you on an early day.

Early on the morning of Monday last my immediate attendance was required to look at an aged horse, of a heavy draught breed, chestnut colour, and in very low condition, belonging to a person of this town. On entering the stable, I found the following symptoms to present themselves:—The horse was standing with his head depressed, and pushed firmly against the wall; legs and ears of a moderate temperature; mouth rather hotter than usual, and moist; breathing calm and regular; pulse about thirty, and full; pupils very much dilated; complete paralysis of both optic nerves, and the animal in a state of lethargy, from which he was with great difficulty aroused. My first impression was that it was a case of coma arising from an over-distended state of the vessels of the brain; and that the absence of many of those symptoms which usually characterize that affection probably depended upon the short time the horse had been attacked, and thus a sufficient time had not elapsed for those symptoms to manifest themselves. Under this impression, I at once proceeded to abstract blood from the jugular vein, and on compressing that vessel with my finger, I was surprised to find several indications of this operation having been previously performed. I also examined the jugular on the other side of the neck, and here also had the lancet made its wounds. I however opened the vein, and abstracted about eight quarts of blood before any effect was produced; I then closed the orifice, administered a cathartic ball, and in the course of half an hour, my patient being much relieved, I left him. I visited him several times during the day: he appeared to be going on favourably until about 8 o'clock, P.M., when the disease was returning with increased activity. I again took away blood until an evident effect was produced upon the system; administered some sedative medicine, and ordered cold water to be continually applied to the head. I now found, on particular inquiry, that my patient had been the property of its present owner about eight months. In November last he experienced an attack of the same kind, but milder in degree, and which was relieved by venesection and aperient medicine (the horse had not, however, been a patient of mine before); that since that time, and even before, he had been gradually losing condition, would frequently when at work reel and stagger in his walk, appear sleepy, and run heedlessly against any object which came in his way. From this I expressed my opinion that there most certainly existed some abnormal formation within the cranial cavity, and which caused a continual pressure on the substance of the brain; but as to the nature of this formation I

could not determine. My impression, however, was, that in all probability there was a collection of fluid within the ventricles; and my reasons for coming to this conclusion were the following; viz. That there was an undue degree of pressure upon the sensorium could not be doubted; and that this pressure operated more particularly upon the optic nerves was also certain; and as a collection of fluid within these cavities would more especially press upon the optic nerves by direct pressure upon the *Thalami nervorum opticorum*, I think I had some reason to form the opinion above stated; although, of course, I could not say positively that this was the case. Again, a pressure on almost any other part of the brain would, most likely, have produced partial if not complete paralysis of some other organ: whereas, no such circumstance had been observed. Having formed this opinion upon the case, of course my prognosis was extremely unfavourable, viz., that although the horse might, perhaps, recover this attack, still he would, at no distant day, be carried off by a future one. On Tuesday I frequently visited my patient, and continued the cold water and sedative medicine until night, when the medicine having operated, and the symptoms being less urgent, the ablutions were discontinued.

Wednesday morning.—Medicine operating rather freely; pulse feeble, and appetite fastidious: this improved, however, during the day, and the animal ate a little grass, and oats mixed with bran. In the evening the action of the cathartic medicine was subsiding, and, on the whole, the horse was progressing favourably.

Thursday morning.—Medicine set, appetite dull, pulse quick and almost imperceptible at the submaxillary artery: discontinue medicine, give gruel, oats, bran, &c. In the afternoon, or rather evening, I was sent for in haste, as the horse was down and in great pain. I immediately attended, and found him lying down, very restless, and apparently suffering great pain, continually changing his position, and especially rising on his fore legs and sitting on his haunches, which position appeared to give temporary relief: the pupils, which had contracted to nearly the usual size, were again dilated, and the optic nerves again paralyzed; the heart beating violently, but the pulsation of the arteries imperceptible; the legs and ears becoming colder every hour; the breathing very quick and laborious, (very much resembling that of a horse badly broken winded when under severe exertion), and the animal becoming rapidly exhausted: with these symptoms, I confess I was completely put to a nonplus. It was not colic or enteritis, and I did not consider it to be gastritis. I had never seen a case of ruptured diaphragm; but, from the writings of others, I was inclined to consider this to be a case of that description. I certainly did not think it to be a chest affection, as no symptom indicating

such had shewn itself. I administered a dose of opiate and diffusive stimulant medicine: the poor animal, however, rapidly got worse, and about one o'clock on Friday morning, being completely exhausted, he was compelled to yield to the grim tyrant, Death.

Sectio cadaveris, Friday evening.—The contents of the abdomen healthy, with the exception of the liver, which was of a dark blue colour, but not otherwise altered. In the thorax were found about five or six quarts of transparent serum, of a yellowish colour, without any particular odour; the pleura costalis and pulmonalis thickened, but not inflamed, except at one part, where the former was considerably inflamed for about the space of a foot; the parenchyma of the lungs was healthy, and I cannot now consider but that the pain which the horse suffered during the last six or eight hours of its existence was in consequence of the disease of the brain. The diaphragm was healthy.

The brain was next examined, in which the only evidence of disease was that of an accumulation of, I should say, not less than two fluid ounces of serum in the lateral ventricles, together with, in the left ventricle, the tumour which you now see, and in the right another tumour of the same description, only three times as large (the one inclosed weighing when taken out exactly *half an ounce*, and the other *one ounce and a half*), and in its centre it had about a teaspoonful of serum. Both tumours were attached to the *plexus choroides*; the ventricles were, of course, enlarged to a considerable extent, and, as a consequence, the *substantia medullaris* was proportionately absorbed.

The structure of the tumours is peculiar. I have examined one of them under the focus of a microscope, and consider it to be made up of small sacs, the cavities of which contain serum, and a vast number of very small metallic-looking substances; (or, to the naked eye, they do not appear unlike the scales of fish), but under the microscope they are seen to consist of infinitely minute crystals. The bulk of the tumour principally consists of a substance apparently analogous to the fibrine of the blood, and of which the sacs already alluded to appear to be formed; and the whole is enclosed in a very thin transparent membrane. The tumours were highly vascular.

Such, Sir, is a brief outline of the case, and which, so far as my reading and observation go, is the first of the kind on record. There is, however, a kind of semicartilaginous glandiform substance said to have been found attached to the *plexus choroides* in the human brain; but the tumours found in the present case do not belong to that class. I think the chemical composition of these malformations would prove an interesting inquiry, and, in the hands of a scientific analytical chemist, might throw some

light on their formation. There are also two other questions of importance ; viz. how long had they existed, and, supposing their presence to have been known, could they have been absorbed. As to the first, my own opinion is, that they had existed for a very long time, probably for years ; and as to the last question, I could not see how their presence could have been detected during life ; but should I ever witness a similar case, I think I shall try the effects of iodine, or a compound of iodine and mercury.

You will, probably, favour your readers with some observations on the case. What I have advanced is but the theory of a young practitioner ; but your opinion would have the superior advantages of science and experience. Perhaps these observations may also draw forth some valuable information from my brother vets.

I am, Sir, your's respectfully.

Yeovil, May 20th, 1848.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—Hon.

TRAVELS IN THE HIMALAYAN PROVINCES OF HINDUSTAN AND THE PANJUB, &c. *By Mr. WM. MOORCROFT and Mr. GEO. TREBECK. Prepared for the Press by Mr. WILSON.*

[Second Notice.]

OUR former notice of this work did not extend beyond the "Preface." That happens, however, to be of a character unusually long and interesting, containing, as it does, a biographical sketch of Mr. Moorcroft, together with other particulars requisite to be known by the reader for the due understanding and relish of the body or substance of the work : apart from all that may entertain or instruct them or us in the course of perusal, the part to which we are now come, and to which our readers will, with us, attach additional interest from the circumstance of its being the production of Mr. Moorcroft himself. In culling our extracts, we have been mainly influenced by the relation, direct or indirect, they have appeared to have to veterinary science. At the same time

they will tend, in some degree, though that be slight perhaps, to exhibit the veterinary proficiency and ardour of Mr. Moorcroft. More conspicuously will they represent him as author, traveller, and scientific inquirer, characters in which our late eminent professional brother shone with light no less creditable to himself than to those who elected him for the equally honourable, arduous, and perilous undertaking. As a traveller, Moorcroft was not to be surpassed "in determination, hardihood, endurance, and spirit of enterprise." As a veterinarian, "his scientific attainments were strictly professional:" thereby shewing that he both followed and loved his profession. As a writer, some letters of his which we published on a former occasion, taken in connexion with the work before us, will at least demonstrate that he held his pen after the manner of a scholar and a gentleman.

"Our cattle had started on the 3d of February, swimming across the river at Rani-Nath, a village on the right bank of the Alakanda, opposite the gate of the palace at Srinagai, in order that they might proceed by a safer though more circuitous route. In the more difficult portions of their journey, porters had been provided to relieve them of their loads; but the grooms, confiding in the experience which they imagined they had acquired, refused to avail themselves of this aid, and consequently a valuable mule perished; his load came in contact with a projecting rock, and he was forced over the edge of the precipice on the other side of him, and killed by the fall. This was the fourth animal I had lost. The horses were killed by accidents, with difficulty avoidable; but the mules perished chiefly through the carelessness of their attendants. If horses are employed in such journeys they should not exceed fourteen hands, and those bred in the hills should be preferred. The mule, however, is a much safer animal; but for the Himalaya, the beast that excels all in caution and security is the jabu, or mule from the Yak of Tartary and the cow."

* * * * *

"The vicinity of Tiri is infested with tigers, and a kind of trap is used to catch them. This is a small chamber of loose, heavy stones, with a sliding door at one end and a loop-hole at the other. The door is kept raised by a slight moveable projection, and from the upper part of it a rope passes over the roof of the hut, which, entering it by the loop-hole at the other extremity, is tied to the neck of a goat, who is slightly fastened within. The tiger, attracted by his prey, enters the hovel, and attempts to carry off the goat. In the struggle that ensues, the door, shaken by the rope in

contact with it, frees itself of the slight impediment opposed to its descent, and, falling down by its own weight, secures the tiger. The animal is then shot through the loop-hole."

* * * * *

"The neat cattle of the (Himalayan) hills are not obtainable for food except by the violation of local prejudices; but the short-tailed sheep of Tartary, after it has been employed some years in carrying loads, furnishes, after fattening, a mutton rarely surpassed for fineness of fibre, juiciness, and flavour. The sheep may be procured in any number at a rupee a head. The goat-mutton is very indifferent. The mast of the oak and horse-chestnut support great numbers of wild hogs, which haunt the upper part of the hills until compelled by the snow to seek for food lower down. They are then waylaid by the inhabitants, and when entangled in the snow-drifts, attacked and speared. The domestic poultry is small, but good if suitably prepared. Pheasants exist in considerable numbers and variety. The male of the monal pheasant weighs usually above five pounds, and is a bird of most magnificent plumage. The chakor, or Francoline partridge, and black partridge, are in great plenty; woodcocks are also met with. I have already alluded to the trout of Alakananda, which, although in its general form and the colour of its flesh it resembles trout, differs from it in many particulars, especially in the structure of its mouth, which is placed more backward, and it has no teeth in its lips; the nose projects farther; the lower lip is thick, leathery, and flat below and convex above, and applies exactly to some moveable bones in the fore part of the palate, against which it squeezes its food. It has a single row of teeth in its throat, and two barbs on each side of the upper lip. The mode of catching it has also been adverted to; but I should think that anglers in England would find it an advantage to substitute the line made from the fibres of the murna for any tackle that they at present employ."

* * * * *

"Whilst waiting for Dharm Sinh, numerous flocks of sheep and goats passed us on their way to Kangra and Chamba. The goats were generally white; the sheep were white, black, pied, and dun; but the fleeces were less fine than I expected to have found them. Iygee Ullah purchased three wethers, selected by him from the flock, for four rupees, and I bought two for the same sum."

* * * * *

"The animals of Ladakh of the domestic species are horses, asses, yaks, cows, the Tho or Yak-mule, sheep, goats, dogs, &c. Of these the horses are small, but active and hardy: they are not numerous or much used. The yak is found only on high lands, and is inferior in appearance and strength to that of Chan-than.

The males are applied almost solely to the transport of burdens. The neat cattle are kept entirely for milk and butter, the consumption of which latter, especially with tea, is very considerable. The Zho is a hybrid, between the male yak and the cow: the male is employed as a gelding for carrying loads and for ploughing, in which latter occupation he is remarkable for docility and endurance. The female Zho is not, strictly speaking, a mule, but her progeny.

"The native breeds of sheep, though larger than those of India, are much smaller than the sheep of Chan-than. There is one species, however, the purik, which is very diminutive, and is remarkable for its complete domestication. This, when of full growth, has scarcely attained the size of a South-down lamb of five or six months: the bone is small, and carcass large in respect to its bulk, and its mutton is most excellent. It gives two lambs within twelve months, and is twice shorn during that period. The clip may afford three pounds in the annual aggregate, and the first yield is fine enough for tolerably good shawls: the whole of the wool is worked up into narrow cloth for home consumption.

"The dog is scarcely more perfectly domesticated than this little animal. During the day in the summer months it is pastured amongst the mountains, but at night, and throughout the winter, it finds shelter in a walled yard, or under the roof of its master. In this state it seeks with incessant assiduity grass, straw, chaff, grain, peelings of esculent vegetables, and always attends the meals of the family for morsels of flour-cake, barley-meal, tea buttered and salted, or exhausted tea leaves, and will sometimes even nibble a bone. It would be an invaluable appendage to the cottage of the British peasant, as it could be maintained at scarcely any cost*.

"The common breed of goat in this and the neighbouring counties of Lassa, Chan-than, and Chinese Turkestan, is the shawl-wool goat, the fleece of which in Ladakh is much finer. The fleece is cut once a year; the wool picked out is sent to Kashmir, but the hair is made into ropes, coarse sacks, and blankets for home consumption. The dogs are large, with a shaggy coat of a dark colour, and are in general of a fierce but intelligent disposition.

"The wild animals are not numerous; they are principally of the goat kind, which are much larger than the domestic goat, and yield a finer wool. The Ibex frequents the loftiest and most inaccessible crags; the male is called Skin, and the female L'Danmo. The

* A letter on the purik sheep, and other topics relating to Ladakh, from Mr. Moorcroft to J. Fleming, Esq., is published in the first volume of the "Transactions of the Royal Asiatic Society," p. 49.—ED.

wild sheep (*ovis ammon*) is also met with, and is much larger than the domestic one. In the eastern parts of the country is a nondescript wild variety of horse, which I may call *Equus Kiang*. It is perhaps more of an ass than horse, but its ears are shorter, and it is certainly not the Gur-khor, or wild ass of Sindh. Its activity and strength render its capture difficult. A mouse, nearly three times the size of the English mouse, with a thick coat of grey fur, and a tail one-third of an inch long, is met with. Hares in some parts of Ladakh are found in considerable numbers, as has been noticed already; and I obtained skins of the squirrel, fox, ounce, bear, lynx, and leopard, although I did not meet with them alive. The natives assert that there is a kind of tiger or jaguar in the mountains, though rarely visiting the valleys. The marmot was seen in considerable numbers on some of the mountain-passes in summer, but in winter it had vanished, slumbering amidst the snow.

“The birds are not numerous, nor in general remarkable. One of the largest is the raven, which is a fierce and powerful bird, of a lofty and active flight in summer, but sullen and dull in winter. Another large bird is the gigantic chakoe, which is much larger than the common partridge. Sparrows, linnets, and robin redbreasts, are numerous and mischievous at seed time and harvest. The crested skylark sings as sweetly as in England, and the gelinok or snow-lark frequents the higher regions. Water-birds of various descriptions haunt the pools and lakes which are dispersed through Ladakh. Fish abound in all the streams, but the chariness of life which is taught by the religion of Buddha prevents their being caught, notwithstanding they would form so important an accession to the means of subsistence available in such a region.

“One of the most important articles of the trade of Ladakh is shawl wool, of which it forms, in some degree, the source, but in a still greater the entrepôt between the countries whence the wool is chiefly supplied, Rodokh and Chan-Kan, and that in which it is consumed, Kashmir. The wool is that of a domesticated goat, and consists of the under fleece, or that next the skin, beneath the outer coat or hair. The breed is the same in Ladakh as in Lassa, Great Thibet, and Chinese Turkistan; but the wool is not so fine as in the breeds of the districts on its eastern and northern frontier. The fleece is cut once a year, and the wool, coarsely picked either in the place from whence it comes, or at Lé, is sold by the importers to the merchants at that city, by whom it is sent on to Kashmir. The Raja and Khalun deal extensively in this trade; but it is also shared by merchants both from Kashmir and Tunir. About eight hundred loads are annually exported to Kashmir, to which country, by ancient custom and engagements, the export is

exclusively confined, and all attempts to convey it to other countries are punished by confiscation. In like manner it is considered in Rodokh and Chan-Khan as illegal to allow a trade in shawl wool except through Ladakh; and in the latter country considerable impediments are opposed to the traffic in wool from Yarkand, although it is of a superior quality and cheapness. The hair of the goat, after it is separated from the wool, is made into ropes, blankets, and bags for home use, and as wrappers for bales of merchandize.

“Although the fleece of the sheep affords a material similar to that of the goat, it is not in sufficient proportion, nor of adequate length, to be considered fit for the manufacture of shawls: it is, therefore, either worked up into woollen cloth, the greater portion of which is reserved for domestic consumption, and a small part is exported, or it is exported for a like manufacture to Kotoch, Chamba, and Kulu, and even to Kashmir. Some of this cloth, shorn and singed into an imitation of long piled velvet, is not without merit as a fabric. The sheep of Chan-Kan are also articles of trade, as they are larger and stronger than the breeds to the westward; and being imported from thence, are re-exported to the hill states, where they are largely purchased as beasts of burden, carrying from twenty-five to thirty pounds weight.

“Besides the fleece of the domesticated goat, that of the wild goat, under the denomination of Asali Tus, is exported in smaller quantities to Kashmir. It is of a light brown colour and exceeding fineness, and is worked into shawls, a species of soft cloth called Tusi, and lining for shawl wool stockings; very few shawls, however, are made from this material. I purchased a small quantity of it at eight rupees the manwati: when picked, for which an additional charge of seven rupees was made, I received about five ounces, or one-eighth of the original quantity, back in very fine shawl wool. Another parcel yielded a fifth. In general, the pickers of shawl wool are paid by the hair, but in this case the hair was considered unfit for making into ropes, &c. Shawls made from this material would be much softer, lighter, and warmer, than those of ordinary fabric. When, without being picked, the Asali Tus is worked into Tusi, it forms a warm, soft cloth, of a drab or grey colour, which is much worn in the hills. It is manufactured at various places in the Panjab. A piece bought at Amritsar for ninety rupees was sold at Delhi for two hundred and fifty; but the Tusi cloth which comes to Hindustan is made from a mixture of the Asali Tus with other wool. This article must be always high priced, from the difficulty of procuring the animal that produces it, the wild goat rarely venturing within gun-shot

during the day, and being obtained only by snares at night, when they come down from the mountains to browse in the valleys."

* * * * *

"We saw many large herds of the kiang, and I made numerous attempts to bring one down, but with invariably bad success. Some were wounded, but not sufficiently to check their speed; and they quickly bounded up the rocks, where it was impossible to follow. They would afford excellent sport to four or five men well mounted, but a single individual has no chance. The kiang allows his pursuer to approach no nearer than five or six hundred yards; he then trots off, turns, looks, and waits until you are almost within distance, when he is off again. If fired at, he is frightened, and scampers off altogether. The Chan-Kan people sometimes catch them by snares, sometimes shoot them. From all I have seen of the animal, I should pronounce him to be neither a horse nor an ass. His shape is as much like one as the other; but his cry is more like braying than neighing. The prevailing colour is a light reddish-chestnut; but the nose, the under part of the lower jaw and neck, the belly and legs, are white; the mane is dun, and erect; the ears are moderately long; the tail bare, and reaching a little below the hock; the height is about fourteen hands. The form, from the fore to the hind leg and feet to a level with the back, is more square than that of an ass; his back is less straight, and there is a dip behind the withers and rounding of the crupper which is more like the shape of the horse; his neck is also more erect and arched than that of the ass. He is, perhaps, more allied to the quaghi, but is without stripes, except a reported one along each side of the back to the tail. These were distinctly seen on a foal, but were not distinguished in the adults.

"Whilst engaged in the pursuit of the kiang, I came occasionally upon wild goats; they were rather higher than the sheep, long in leg, and spare in body, with a light head and neck, and curved horns of a moderate size. They bounded off, as I approached, exactly like deer."

* * * * *

"At the same time that my young friend was despatched to Piti, I undertook an excursion to Dras, and left Lé for that purpose on the 10th of June. The sowing of wheat had been finished at the end of May, and the most forward plants were now five inches high. Peas and beans were also above the ground. Lucerne was only just bursting where the soil was dry, but where it was well watered it was full and high. In Ladakh this grass is almost an aquatic; though in India it perishes if long under water in the rainy season. It is also worthy of remark, that in this

country pure gravel, without mould or clay, will rear lucerne if it be plentifully watered."

* * * *

"The cows of this district (Gonh) were more numerous, and in better condition than any I have seen since leaving the southern hills. They were small but well shaped, with small horns; the prevailing colour was black, but it varied to pure red, and mixed with white. They are pastured on the hills during the day, on lucerne and white clover, and at night are fed with the wild oat gathered from amongst the corn for this purpose. Before being taken to their sheds they browsed upon some common pasture-grass which was flooded an hour before their return. Two cows were fastened together by a rope attached to willow rings passed through their noses, and children were employed to prevent their straying."

* * * *

"On the 19th of June we crossed the pass of Parang-La. The ascent, though not of the most abrupt description, occupied us from daybreak till noon. In the lower part the snow lay in lines, with edges sufficiently frozen to bear our weight, and we stepped along as if we had been walking upon boards placed on their edges. Higher up it was softened by the sun, and we had the agreeable variety of sinking into it knee deep. My horse was so utterly incapable of proceeding, long before reaching the summit, that it was necessary to dismount and leave him to his fate. I should have put an end to his sufferings, but was persuaded that some men might be sent back for him with food from Kiwar, though I had little expectation of this being effected in time. The height of the pass above the sea was not less than 19,000 feet."

* * * *

"From Lang Kartse we proceeded by a different route from that formerly followed by Sankho, and ascended the bank of the Zakut river, running from west by south, and falling into the Kartse-chu. The path was narrow, rugged, and steep. At the distance of a mile and a half we came to a small village, from the lands of which the crops had been lately reaped. A large patch of ground was thickly covered with prangos plants. As we ascended we experienced the keenness of the wintry wind, and round the stems of a species of dock thin bands or ribands of ice had formed. The road then descended, but soon again took an ascending direction, skirting the right bank of a stream, at a considerable height above it, which was carrying a supply of water to the Kartse-chu. Here, on stepping over a block of jasper which crossed the road, my horse fell, and rolled with me a considerable way down the slope before I could get loose. The softness of the snow prevented

my receiving any serious injury, and the horse was brought up by a block of stone just upon the edge of a precipitous rock."

* * * * *

"The animals and birds of Kashmir are much the same as those of Hindustan. The horses are small and indifferent. Sheep are plentiful, and the mutton is well flavoured; the fat is particularly white. Whether this is owing to any peculiarity in their feed, I shall not undertake to determine; but although it would be very possible to prepare an ample sufficiency of hay for winter fodder, the preference is given to the leaves of certain trees—as the walnut, willow, mulberry, elm, and several others, which are considered much more warming and nutritious than hay, especially for sheep. Small branches, after having been cut when in full leaf, are immediately so disposed within the first forks of the tree to which they belong, as to be thereby retained; and although loosely piled, yet, in consequence of being entangled amongst themselves, are not detached by the wind; neither do they lose their leaves, nor are the latter in any respect injured. This forage is reserved for the severe part of the winter, when the cattle are driven under the trees in which the store is suspended, and the dry branches being pulled down, the leaves are eaten by them with great avidity. When grass is stored for winter fodder, it is twisted into thick ropes immediately after having been cut, and in this state hung across the upper branches of trees, without other preparation, for hay; it thus keeps free from rotteness, and, generally, even from mouldiness, notwithstanding the great quantity of rain and snow that falls. Grass thus dried is given to the cattle in the morning, and leaves in the afternoon and evening: oil-cake, made of linseed, walnut kernels, mustard seed, along with the seed of cotton, are given to fatten cattle, as are flags, or the leaves of sedge. The prangos, which likewise grows in Kashmir, is also largely used as winter fodder."

* * * * *

"From Aibek to the foot of the mountains was about eight miles. There were several towns in ruins, having been destroyed by Murad Beg, who had made slaves of their inhabitants. There still remained a number of inhabited villages, and the land, where cultivated, was well tilled and watered. Every village had large droves of brood mares, and they were more numerous than cows: they were generally about fourteen hands high, sometimes too long in their bodies, but, in other respects, well formed. They would have been well worth from two hundred and fifty to three hundred rupees in Hindustan: here they were purchased for a toman or a toman and a half, or from twenty to thirty rupees.

"In order to elude the vigilance of the Yesawal and his detachment, it was agreed that three of my horses should be led into the

town, as if to be in readiness for the morning's journey, that after nightfall they should be conducted to a burying-ground at some distance by a couple of trusty persons, who were to act as my guides to Talikan, and that I should endeavour to join them as soon and as secretly as practicable. The horses were sent off. As the evening advanced, the guard was reinforced, and horsemen from the town were continually approaching and parading round my tent. No time was to be lost. Going forth in my usual attire, and inspecting my sentinels, I returned, and in a few minutes threw an Uzbek silk dress over my own, with an upper woollen mantle commonly worn, put a sheepskin cap upon my head, enfolded at bottom by a lungi or turban, one end of which hung loose, and the other was brought across my mouth and chin, so as to conceal my face and want of beard, and, thus equipped, I sallied forth on foot, directing my path towards an unfrequented part of the mountains, concealing my person as much as possible by descending into ravines and hollows. The moon was young, but rain fell, and the clouds augmented the obscurity of the night.

Having walked about half a mile, I with some difficulty made out the place where I was to meet my guides, and at last found them at their posts, with one of my own people and our three horses. We mounted, and galloped to the south until we reached the foot of the mountain, when, skirting the adjacent portion of the town, we followed the foot of the range for some miles, finding our way with difficulty. The path we had taken was little frequented, and as the badness of the night was unfavourable to travelling, we met with no one upon the road. At Yang Arekh we were embarrassed amongst the ruins, but at last cleared them, and passed close to the fort, without being observed. Beyond this place, the plain, without tree or shrub, was fetlock deep in water, and our horses had great difficulty in making way over the clayey soil. At Bash Abdan we were nearly detected; for my guides having imprudently entered to light a pipe, found there a party of Hindus, the servants of the Dewan Begi. Luckily, I remained without, awaiting their return. At the pass of Shahbagli some uncertainty prevailed as to our proper road, and my guides, after some time, found themselves at the bottom of a ravine, where it became necessary to dismount, and wait the break of day. However, on the rain diminishing and the atmosphere clearing a little we resumed confidence, and discovered a path, by which we crossed the mountain just as the day was beginning to dawn. Providential it was that we had not traversed the mountain in the night by the usual road; for in the grey of the morning we discerned, at the eastern foot of the pass, the fires of a party, which must have been one of alemans or banditti, as travellers never halt in such a situ-

ation. We continued our advance on the direct road, as if we had not noticed them; but as soon as we had got behind a rising ground, which secured us from view, we turned off to the north, and galloped hard until we thought ourselves out of danger of pursuit. Proceeding on the same line, we came to an abdan, or a path which led to the Oxus, and then returned to the direction on Kunduz. Leaving it a short distance to our left, we rode to the east and south, traversing a large extent of barren plain. After many deviations, which made me apprehend the competency of my guides, we observed some Uzbeks fording the Ghorî river, and followed their direction. The river was about a hundred yards broad, and the current was rapid. We then rode on till it was dark, when we came upon an Uzbek encampment, where it was thought we might venture to stop and give our horses a feed of barley, which we had brought in our saddle-bags. The animals had been without food for twenty-four hours. One of my men, who spoke Turki like an Uzbek, went amongst their tents to purchase some milk and salted tea, whilst I lay down upon a felt; and the other guide, who remained with me, replied to those who inquired who I was, that I was his fellow-traveller, and was very ill with fever. Milk was not procurable, but we obtained a little tea. I was then anxious to depart, but my guides were overcome with fatigue, and I was obliged to consent to their taking about an hour's rest. We then remounted, and rode on. The night was dark, and the path was indistinct; and when it wanted about three hours of day, my guides declared they could not venture to proceed, as they were uncertain of the road. We were, therefore, obliged to halt till towards dawn, when we were joined by another benighted traveller, from whose information it was ascertained that we had lost our way. It was with great difficulty that we recovered it, and the morning had fairly broke, when it was discovered that we had considerably retrograded, and were not above four kos in advance from Kunduz, on a tract abounding with water and mud, frequently up to the horses' knees. At eight o'clock we were opposite to Khanahabad, about seven kos from Kunduz. It seemed to be a large town on the right bank of the Turkhan river, with a fort of some extent, but not in good repair. We pushed on as fast as we could, and, avoiding the main road, which was somewhat circuitous, forded the river, and crossed a rice level. Whilst yet far distant from Palican, a person was met who reported that Baba Bey was on his way to the same place, at some distance in our rear. We had not proceeded much farther, when we had the mortification of descriing Baba Bey, with a numerous party, advancing at a round pace, and gaining upon us rapidly. We, however, cleared the pass that leads to

the plain of Paliccin, and encountered a cavalcade, both of horse and foot, going out to meet the governor of Pash Kurghan, who was accompanied by Khan Jan, the eldest son of Murad Beg. The interchange of civilities, indispensable on such occasions, would, we hoped, delay the approach of our pursuers, if such they were, and give us time to reach the residence of the Pir. Unfortunately, this was at some distance beyond the town, and we thought it expedient to make a circuit across a ridge of mountains, in preference to traversing the town. I was here obliged to change horses with one of my guides, as my own was unable to get beyond a walk; a failure which, considering his steadiness, I ascribed to his being galled by my English saddle."

* * * * *

"We left Karshi on the 21st February, and resumed our journey to Bokhara. The country we traversed resembled that we had passed between Karshi and the Oxus: after quitting the confines of the strip of cultivated ground on which that city stands, we again came to a sandy and sterile tract, less undulating than that nearer the river, but equally unproductive. It was with no slender satisfaction, that, on the morning of the 25th February, 1825, we found ourselves at the end of our protracted pilgrimage, at the gates of that city which had for five years been the object of our wanderings, privations, and perils."

* * * * *

"The valley of Deas is situated in the district of the same name. The climate of Deas is, like that of Ladakh in general, severely cold for half the year, and during the other half ranging from intense heat in the day to cold, almost freezing, in the night. The inhabitants of Deas are rather under the middle stature, though taller than those of the eastern districts, and have coarse and unattractive features. Their houses are built of pebbles, cemented with earth, and with terraced roofs, and are most inartificial fabrics. As usual, they are built without chimneys, and the smoke with which they are commonly filled accounts for the frequency of complaints of the eyes. In the course of two months I operated on fifty cataracts, and the patients who applied for relief in inflammatory affections of those organs were exceedingly numerous."

Our extracts have run to greater lengths than we anticipated; we hope they have not grown tediously long. As we continued our perusal of the work, page after page, the matter seemed to increase in interest, and we had finished reading it before we discovered we had marked for extraction more and lengthier

paragraphs than we had meditated taking from it. We felt we had transgressed, and yet we felt an unwillingness to abridge or to curtail; knowing that, in all probability, this notice would for ever close our pages to the honoured memory and departed worth of the veterinarian,—MOORCROFT.

SPONGIO-PILINE.

WHILST surgeons are engaged in experiments on any and every new invention that may happen to be introduced to their notice as in any way promising to be auxiliary to the healing art, it would, indeed, be a shame were veterinary surgeons to be found idle or standing still in this respect—ignorant or indifferent about what, in the world of improvement, was going on as applicable to their own art. We trust such is not the case. On the contrary, we entertain little doubt but that there are many veterinarians who, like ourselves, have already put to trial the above-named novel substance, desirous of eliciting its properties and uses. For our own part, we feel it our duty to say something about it, notwithstanding, as we must confess, our experiments with it have neither been so multiplied nor so varied as we could have wished.

SPONGIO-PILINE is a newly invented substance, consisting—as its name implies—in a mixture of sponge and wool felted together, spread out, and afterwards coated on one side with a plaster of caoutchouc, which forms a sort of foundation for the felting, and at the same time renders it, on the side coated, impervious to wet or steam. As will probably suggest itself from this cursory description, spongio-piline much resembles sheep's skin, the *cutis* representing the india-rubber foundation, while for the wool is substituted the spongio-piline; and thus, while one side is a pilous, and, consequently, an imbibing and retaining surface, the other is a smooth and an impermeable one; and for these reasons has it become a substitute for poultices and fomentations, and, as such, has for some months past been in use in several of our metropolitan hospitals. Now, supposing that it be found as efficacious as poulticing and fomenting, we need not tell veterinarians of the great

utility such an application will be likely to prove to them in practice, not only from the labour and trouble it will save, but from the extreme convenience of its application; seeing that the spongio-piline admits of being cut and moulded into any and every shape and size that may be required for each particular part. Every veterinarian knows but too well the trouble and vexation he has to encounter in applying poultices to some parts, while to others he never dares to think of their application, however anxiously he may desire it: here the spongio-piline will be found eminently serviceable. We have used it for sore throats, confining a piece of the proper size and shape simply by means of the throat latch of the headstall; we have also used it for sprained legs, confining a piece of requisite size to go round the leg by means of a long linen bandage, or, what perhaps is better, a flannel-roller bandage. For convenience of application, for bibulousness, for lightness, we must confess we are highly pleased with the spongio-piline; the only question with us being whether or not it is sufficiently permanently *retentive* of heat to render it equivalent to a poultice. There is, however, one case—and one in particular—in which, though we have not as yet had an opportunity of putting it to the test, we feel no hesitation in pronouncing the spongio-piline likely to prove of signal service, and that is, the case of colic “gripes,” or enteritis. While the animal is rolling about and pawing in a paroxysm of pain, we can well imagine that a broad sheet of spongio-piline, dipped in water as hot as the hands can bear it, wrung out, and applied at once to the abdomen, would be likely to prove quite as effectual as a fresh-flayed sheep-skin, and everybody knows the difficulty in most places, and in some the impossibility, of obtaining the latter.

Mr. Markwick, the inventor and patentee of the spongio-piline, has also formed out of it pads, to answer the purpose of stoppings, for horses' feet; and excellently calculated the spongio-pilous substance of itself is for that purpose, each pad soaking up readily as much as two ounces of water. But the pad, as now constructed, will not remain in the foot, and, moreover, is not sufficiently durable for the purpose of foot-stopping. What we should recommend Mr. Markwick to do, is to stick the spongio-piline upon a *gutta percha*

foundation of the requisite thickness. This will give the pad *strength*, and will materially increase its durability. And this possibly might, from the known elasticity of gutta percha, render it consistent and springy enough, when a vacuity for the frog has been cut out, to remain in the foot without fastening.

Extracts from Foreign Journals.

COMPTE-RENDU OF THE CENTRAL SOCIETY OF VETERINARY MEDICINE OF FRANCE FOR 1847.

WE find nothing in the "Report" to interest us, but in the cases annexed to it there are some observations which may be worthy notice. We subjoin the best of them.

1.—*Some curious Observations on Division of the Neck of the Uterus in difficult and impossible Parturition.*

[Addressed to the Society by M. BONNET, V.S., Yssel, Corrèze.]

M. Bonnet would discard altogether from veterinary surgery both the Cæsarean operation and embryotomy, and introduce as a substitute for them division of the neck of the uterus, whereby are preserved both the mother and the progeny. In support of this suggestion, M. Bonnet asserts, that in four cows, in which parturition was rendered impossible in consequence of the super-development of the fœtuses and paralysis of the hind quarters, combined, in three of them with inversion of the vagina, and in the fourth with scirrhus induration of the neck of the womb, the former (three) were perfectly recovered, save that one of them remained paralytic; the last case succumbed, owing, according to M. Bonnet, to an infection referrible to the death and decomposition of the fœtus within the womb.

Although there is nothing new in the operation of division of the neck of the uterus, these observations suffer no diminution of importance from that circumstance; seeing that they are calculated to instigate veterinary practitioners in breeding countries to the employment of such an operation in the generality of cases, in preference to embryotomy.

2.—*A Case of Recovery from Idiopathic Tetanus through Castration.*

[By M. VALTAT, V.S. at Paris.]

After shewing the grave nature of tetanus in horses, and how frequently are found to fail all curative measures employed to counteract it, M. Valtat calls to mind some successes he has obtained in idiopathic tetanus through the employment of castration; not recommending the operation under a violent attack of tetanus, but warning us not to reject it when the progress of the disease is tardy.

M. Valtat concludes his paper with the history of the case of a horse, which induced him to make the circumstance known to the Society. The animal had been ill a week; every medicament recommended in such a case had been tried in vain: at last recourse was had to castration *à testicules couverts*, as a forlorn hope. Ten days afterwards the horse went to his work.

* * British veterinarians rarely have an opportunity of testing the efficacy of this novel remedy for tetanic diseases.—ED. VET.

3.—*Pneumonia in Horses.*

[By M. PRANGÉ, V.S., formerly in the army; now at Paris.]

Notwithstanding pneumonia in horses, complicated or not with gangrene, is a malady well enough known at the present day, M. Prangé has devoted his attention afresh, and with a careful minuteness, in all its phases and complications, to a disease of the kind which, in 1841, prevailed enzootically among the horses of the 8th Regiment of Hussars.

What was remarkable in this malady was, that the thirty-one animals attacked with it died in from the third to the sixty-second day of gangrene of the lungs. M. Prangé attributed the disease, and especially the gangrenous character it assumed in almost every case, to circumstances connected with the events of 1840, and to the unhealthy quarters the regiment, at that time at Lunéville, occupied. Without commenting on the pernicious influence excited by such causes as are here mentioned in animals affected with pneumonia, we may briefly state the fact, that, during the first six months of the year 1841, the horses of the 8th Hussars were not the only ones attacked by the disease described by M. Prangé; and that, in several other instances, gangrene proved its termination.

The other "Memoirs" appended to the Report are without interest.

*Stomach Staggers successfully treated by Ether Inhalation
and Purgatives.*

[From the "Recueil de Médecine Vétérinaire" for Nov. and Dec. 1847.]

The subject of this case was an entire horse, who, for five or six days past, had been observed to be dull, and since two days past, having been subjected to heavier work than usual, had refused his corn. From this was remarked a propensity, becoming daily more observable, to run his forehead against the wall. This induced his owner to consult a veterinary surgeon, by whom he was advised to send his horse to the Alfort Veterinary College.

Nov. 4, 1847.—Admitted into the College; examined while loose in a box: he evinced the following symptoms:—

Great dejection—unsteady gait; the head, held in a perpendicular line with the ground, is forcibly maintained under the manger against the wall in front—the fore limbs are bent and trembling (this possibly may be, in some measure, attributed to his having come from a long distance to the College)—respiration slow and laboured—mouth hot, and not so moist as in health—abdomen, though but little tense, is very tender, and it is constipated—pulse very slow, soft, and difficult to be felt—conjunctive membrane has a remarkable saffron-yellow taint, the buccal membrane having the same hue, but which is less apparent in the Schneiderian.

Diagnostic.—Symptomatic staggers.

Prognostic.—Unfavourable, there being much more likelihood of death than recovery.

Treatment.—Administration of 30 grammes of aloes in a pint and a half of warm water. Purgative and stimulating lavements.

Some moments of quiet followed the exhibition of the drench; soon, however, grinding of the teeth presaged another attack. Not being as yet tied up, the animal commenced violent throes from side to side, striking his head against every obstacle in its way. He was now fastened up with two ropes, and the rack and manger were, for defence, covered with straw mattings. The window was also protected by straw, which served likewise to moderate the light.

To this first attack, which lasted but a few minutes, succeeded an interval of tranquility, during which the head remained doggedly forced into the right corner of the box. Soon, however, the animal fell all at once to the ground, making then some fruitless efforts to rise again; to which succeeded prostration and somnolence.

Scarcely had a quarter of an hour elapsed before a fresh paroxysm manifested itself. In the course of it, making a violent effort, the horse reared himself upon his hind quarters, and, making the ground a *point d'appui* for his head, he threw his entire weight upon it. In this singular posture, the head was flexed to that degree upon the neck that there appeared every reason to dread a luxation. Nevertheless, no harm resulted, and, by a second effort equally *brusque*, the animal was on his legs again. Instantly he went to take up a *point d'appui* against the rack, in which attitude he continued until night.

Nov. 5.—From the report made of him during the night, it appeared the patient had experienced fits of agitation, but that, since two o'clock A.M., he had been tranquil. This morning there appeared no great difference in him. Let loose out of the stable, he turned indifferently to the right or to the left, according as his head was inclined on the one side or the other. His step evinced no assurance. His countenance expressed, in its fixity of regard, unconsciousness of surrounding objects. And in the stable he is continually, as the phrase goes, “boring with his head.”

Prescription.—Inhalation of the fumes of ether, 500 grammes of sulphate of soda in his water. Laxative lavements. Diet.

In the absence of any apparatus for the purpose, we were compelled, in order to carry the prescription of ether into effect, to contrive something. A linen bag was procured with a slip-knot around its aperture, by which it might be fitted to the muzzle; and in this was placed a large sponge lodged in a wooden bowl, upon which ether was poured in sufficient quantity to saturate it. It was precisely ten o'clock when the animal's head was enveloped around the muzzle in the ether bag: at a quarter past ten, both motion and sensibility had become momentarily annihilated; the animal failed at once upon all four legs, and fell to the ground (in appearance) a lifeless mass. The æther was administered four times afterwards, and the animal in the end recovered.

Extracts from Domestic Journals.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

Shoeing Horses.—MR. George Turner, of Barton, near Exeter, having presented at the former meeting of the Council a set of Mr. Miles' model hoofs, illustrating the mode of shoeing horses advocated in that gentleman's work on the Foot of the Horse, a copy of which Mr. Turner also presented at the same time, an

interesting discussion ensued on this subject, in which Mr. Thomas Turner, Professor Sewell, Colonel Challoner, and Mr. Parkins, took part. Mr. Turner stated that the system of shoeing advocated by Mr. Miles was known in the profession as the "unilateral" (or side-nailing) mode, in which the shoe was nailed to the hoof with the most decided effects in preventing the navicular disease to which the horse's hoof was so frequently liable; a system, he added, which, in common justice, he might be allowed to say was founded upon the important principle discovered by his brother, Mr. James Turner, V.S., of Regent-street, and published by him many years ago in his work on the Foot of the Horse, of which, at the next meeting of the Council, a copy should be presented for the acceptance of the Society. Professor Sewell remarked, that he had found old horses shod with a layer of leather, forming an artificial sole between the shoe and the hoof, recover from the severest affections arising from injury to the hoof, such, for instance, as contractions, brittleness, sand-cracks; or diseases even of the foot itself, such as thrushes, canker, and corns; and perfectly regain their original elasticity and firmness. He also strongly advised that all horses for road or street work should be shod in that manner during the whole period of their being required for use. The plan in question had been employed by Professor Sewell for the last thirty years. The leather sole prevented that concussion from taking place against the sensitive part of the foot which resulted in inflammation; and, by excluding all injurious substances from the hoof, those frequent accidents were avoided which arose from the falls resulting from the bruising and puncturing occasioned by such hard and sharp substances in the natural horny sole. The plan required a little practice to carry it out successfully; and it was not with an injudicious regard to economy to be abandoned, when, after its adoption for some time, it might seem, from the apparent soundness and safety of the feet, that the horses no longer required it. Colonel Challoner observed, that seventeen years ago Mr. James Turner had explained to him the principle of unilateral nailing, to which the attention of the Council was then called, and had practised it on Colonel Challoner's horses for the avowed purpose of promoting the expansion of the hoof; but Colonel Challoner had since that time been led to adopt the plan of felt-shoeing for shell-footed horses, namely, that of inserting, instead of leather, as practised by Professor Sewell, nothing more than thick felt, or thick gun-wadding, between the shoe and hoof of the horse. He had found this plan productive of the most beneficial results. Mr. Parkins had also employed Mr. James Turner many years ago to shoe his horses on the unilateral principle.—*Mark Lane Express.*

Probangs and Trocars for Cattle.—Professor Sewell presented to the Society further specimens of instruments of practical utility in cases of choking, or of the hove, in cattle, and favoured the Council with additional directions connected with the use of such apparatus. He also presented, for the inspection of members, the model of an ox, on which was marked the exact spot where, in the case of hove, the trocar ought to be inserted through the inflated hide into the rumen or paunch, namely, a full hand's-breadth below the loins, and behind the last rib, on the left side of the animal. The laterally perforated cylinder, after the stiletto had been withdrawn, might remain in its place of insertion even until the following day, if gas continued to be evolved; and, on its removal, an adhesive pitch plaster might be applied over the punctured orifice. The elastic probangs presented by Professor Sewell were very useful for unchoking horses, colts, calves, or other stock, by dislodging the impeding food from the gullet, and were much preferable to the hempen ropes often used instead of probangs for that purpose.—*Mark Lane Express.*

ROYAL SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS.

THE Annual Meeting of this well-known and valuable Society was held on Saturday at the Hanover-square rooms, and was very respectably attended. The Lord Bishop of Norwich presided, and in an admirable speech advocated the interests and explained the objects of the Society. The right reverend prelate, in the course of his address, alluded particularly to the Smithfield nuisance, and to the suppression of dog and cock fights. He also expressed his disapprobation of *battues*, which he characterized as un-English forms of sport; and of a too great love for animals, as in the case of lap-dogs. Mr. Thomas, the secretary, read the Report, from which it appeared that the position of the Society was highly satisfactory, and that, during the past year, both at home and abroad, great efforts had been made to protect the lower animals from cruel treatment. The progress through Parliament of a bill for the promotion of the Society's objects was alluded to, and the effect of which, when passed, will be to give magistrates a more complete jurisdiction in dealing with that class of offences for the prevention of which the Society was instituted. During

the past year 200 convictions have been obtained for acts of wanton cruelty to animals. Mr. G. Wilks, Mr. G. A. Warre, Mr. R. E. Broughton (magistrate of Marylebone Police Court), Lord Dudley Stuart, Dr. Carpenter, Mr. G. Raymond, Mr. S. Buckingham, and Mr. Mackinnon severally addressed the meeting in support of the usual resolutions; which having been unanimously adopted, the proceedings terminated. — *The Times*, May 22d.

THE VETERINARIAN, JUNE 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

IT gratified us, as they say in Lancashire, “above a bit,” to behold our professional brethren assembled at their anniversary meeting in undiminished numbers; it gratified us yet more to find ourselves confronted there with such an array of old and esteemed friends as we do not remember to have seen since the days when Coleman or Cooper annually presided at the “pupils’ anniversary dinner:” men whose heads had grown hoary in the profession, and whose hearts, like the needle, ever true to the north pole, still vibrated for the welfare and promotion of veterinary science. The very presence of such men was enough to bespeak the *feeling* of the profession; the circumstance of several of them having travelled scores of miles to be present at the meeting must have told daggers to the breasts of those who would have been well pleased had the general meeting proved a failure, and ended, as it did last year, in turbulence, declamation, and quarrelling. But, to the credit and honour of the great majority present, there was a totally different feeling abroad,—a feeling of unanimity and amity, and a determination to put down any attempt at interruption and clamour. There might, to be sure, have been picked out half-a-dozen discontents; but the opposition set up by them proved of so feeble and pithless a character, that, seemingly out of consideration for the weakness of their cause, reply was mercifully withheld.

A most unusual length of time was taken up in the reading of the "Report:" not that it was of itself at all a lengthy production, but that the documents necessarily forming part of it were several, and were protracted as well. These were—

1st. The Petition of the Governors of the Royal Veterinary College of London, and the Highland Society of Scotland, for a new charter.

2dly. The Abstract of the Charter petitioned for.

3dly. The reply of the Council why the same should not be granted.

4thly. The counter-report of Council, in the form of "Memorial."

5thly. The Registration Reports.

Notwithstanding, however, the great length to which the report, with the above adjuncts ran, and notwithstanding it was considerably past, "precisely one o'clock," before the President opened the meeting, the business of the day was brought to a close sufficiently early to enable a score or so of the members present to sit down by five o'clock at the tavern (the Freemasons') where the meeting was held, to a dinner good in itself, and rendered better still by being ready to be served by the time the meeting was concluded.

And this *finale* turned out by no means the least pleasurable part of the day's business; for, at the table we recognized old friends and old faces, and drank "success to the charter," and "confusion to its enemies," and so made it a "feast of fraternity," and withal broke up at an hour early enough to admit of our country friends resuming their seats in the "trains" for home: reluctantly parting with them with reciprocal assurances to meet again on the same day next year, in maintenance of the good cause of the charter and professional fellowship.

The Report of Council for the sessional year 1847-8, we have said, is by no means, of itself, a lengthy document; on the contrary, it is somewhat shorter than usual, and has, as it would seem, judiciously been made so on account of the important introductions with which it had to be charged. It has been penned by our Secretary in his usual happy style, and will be found a comprehensive *compte-rendu* of the transactions of Council for the past year; at the same time that it exhibits too faithful a picture of the present position and finances of the Royal College of Veterinary Surgeons. For how many years longer are we doomed to make the degrading

confession, that we possess "not even a lath-and-plaster tenement" to hold our meetings in and invite our members to? The College of Physicians once had its representative in Warwick-lane; the College of Surgeons in Newgate-lane: both, compared with the present colleges, it is true, lowly habitations; but still, worse than either is our chartered body, for that is absolutely *colleageless*. The Royal College of Veterinary Surgeons,—“tell it not in Gath,”—hath not wherewithal to lie its head. And yet, *nous ne sommes pas absolument au desespoir*. Our Secretary tells us—and we believe him—“The good time will come.” May he and we live to see it!

No little praise, no few thanks, are due to our Registrar, Mr. Arthur Cherry, for the activity and method with which he has conducted, and the successful issue to which he has been enabled to bring, the troublesome business of registration. It is a business necessarily carried on mainly by letter, and letter-writing in such numbers, to receive replies such as are expected or required—even when the persons written to are willing and able to communicate all they know—is not the most pleasant occupation in the world; and when they do not happen to turn out either one or the other the task becomes both tedious and vexatious. However, Mr. Cherry was not to be discouraged, although he foresaw he should fail in accomplishing all he desired; and it is to his perseverance in the face not merely of disinclination or unwillingness, but of dogged refusal, to communicate information, that he has now reason to congratulate himself on having achieved so much as he has; notwithstanding that consummation of registration which by all must be devoutly looked forward to must remain over for another year or two to come.

The new list of the veterinary profession, as compiled from vouchers actually in the possession of the Registrar, comprises the names and residences of 717* Members of the Royal College of Veterinary Surgeons. The former list, published as soon after the obtainment of the Charter as the settlement of matters would permit, under the superintendence of Mr. Walton Mayer, who had many difficulties at the time to contend with, numbered 1046

* In the “Third Report,” by which the “List of Members” is prefaced, for “upwards of 800” read upwards of 700.

Members; while the last issued by the Royal Veterinary College comprises 826 names*. The apparent falling off in numbers in the present list—which for correctness and convenience of reference will be found the best hitherto published—is accountable for in the rule Mr. Cherry laid down for his own guidance, viz. that of refusing to register any name for which he had not either actually received a voucher, or else had in his possession accredited authority. There is no member of the profession who will like to be without “the correct list.” We have authority for saying, that it may be obtained per post by application to the Registrar.

We would fain address a word or two to such individuals as have chosen to present themselves for examination, as to their competence as veterinary practitioners, before other Boards or Committees save the one legitimately appointed for that specific purpose by the Council of the Royal College of Veterinary Surgeons. The Charter is either valid or invalid—either a substance or a shadow—an instrument of law, or a bugbear set up to deter the timid and mislead the unwary. We apprehend, as matters stand at present, in the absence of other charters, the fact of the existing Charter being operative—so far as a Royal Charter needing parliamentary support can be operative—can neither be questioned nor gainsayed. The government authorities—“the powers that be”—the public—will not fail to acknowledge it; nor will they, when the fitting season and opportunity shall arrive—and that may not prove so very long first—hesitate to recommend the Royal Charter to the notice of the Legislature, with a view to its being armed with such powers, privileges, and immunities, as shall be found consistent with the present order of legislative affairs, and consonant with charters of a similar description. Now, supposing no other charter be granted by the Queen, and supposing the present one be received by Parliament, in what position will those individuals find themselves who have chosen or been advised to run counter to the chartered body, in having presented themselves for examination before an assemblage of persons destitute of any

* None, we believe, has been printed since 1842.

authority either to examine for or to grant diplomas? Instead of ameliorating their former condition, as uncertificated students, they have absolutely made it worse. In having taken such a course, they have shut themselves out from the incorporated body of the profession; and so long as they persist in such an irregular proceeding they must remain excluded—unacknowledged by their own profession, unrecognised by the law, unrespected by the public. In a word, they are, to all intents and purposes, *professionally* outlawed. We, therefore, entreat them, ere too much time fly away—while yet their memories are fresh with the knowledge they have gained at “College”—to reconsider the business; to retrace the steps they have made in error or thoughtlessness; and to come without delay, and offer themselves for examination before the legalized Board of Examiners. It is true they will have to pay, in addition to what they may have already paid, their ten guineas each; but what is the consideration of such a sum compared with the disadvantages they actually labour under, added to the aspersions they will lay themselves open to have cast upon them during a long career of professional practice? To conclude, we say again to those individuals, “Strike the iron while it is hot;” let not the sun go down upon your present state of unrecognition and exclusion.

Mr. Leach's case of “coma in a horse,” the result of “two tumours and a large quantity of serum in the lateral ventricles,” while it is interesting on account of its rarity, is valuable to us for the pathological chain of connexion traceable all the way through between the symptoms during life and the strange appearances presented after death. Mr. Leach, from the symptoms present when he was called in, and from what he had been able to learn of the *history* of the case—a point in all similar cases of such vast import—sagaciously anticipated organic changes in the brain, and framed his prognosis accordingly; thus putting it out of the power of his employer to entertain hopes of recovery, while in his own mind he had come to a tolerably correct notion of what he should find, in case of death, and the whereabouts of the proximate cause of the coma. The tumour Mr. Leach has sent us—for which we return him our best thanks—is about the size of a large filbert,

and of a flattened ovoid shape. And we find it composed of a tolerably dense outer envelope (rendered tough, perhaps, by being somewhat dried) in which is enclosed a pale, dingy, reddish-brown, granular substance, containing, as it would appear to us through a common magnifying glass, little irregular cysts or sacs; one of which, of larger size than the rest, contains as much as three or four drops of thick creamy-looking pus. And near to this sort of little *vomica* we found a whitish solid tubercle, as large as a tick bean, exhibiting, when cut across, a solid substance looking like fibro-cartilage. Mr. Leach's account of the larger tumour, however, must be taken in preference to ours, he having had the advantage of a microscope.

Mr. Hawthorn's case of "rupture of the mesentery" has to us the appearance of strangeness or rarity. We must acknowledge our want of observation in cattle pathology forbids us remarking on what seems to us like singular success in a bold operation. We wish some of our friends in the country would favour Mr. Hawthorn and us with the results of their practice in such matters.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of May 23, 1848.

A SPECIAL MEETING,

Called pursuant to the Directions in the Charter to elect Officers, &c.

Present—the PRESIDENT, the SECRETARY, the TREASURER, Messrs. ARTHUR CHERRY, PEECH, HENDERSON, ROBINSON, GODWIN, BRABY, JAS. TURNER, and F. KING.

THE minutes being read and confirmed, it was moved by *Mr. Field*, and seconded by *Mr. Godwin*, "That Mr. Thos. Turner be the President for the year ensuing."

A ballot took place; but no other name being returned, that gentleman was declared unanimously elected.

Mr. T. Turner briefly returned thanks.

The Secretary stated, that it seemed to him highly desirable that the Vice-Presidents should be elected from amongst the numbers of the country practitioners, and that the parties whose names he should submit for their consideration were all strangers

to him. He believed them to be of high repute in their respective localities, and of long standing in the profession; of course, this nomination was only to facilitate business, as any other name or names than those he proposed could be returned.

A ballot was then taken, and the Secretary shewed the result as follows:—

Messrs. Burley, Leicester . . 9	Messrs. Peech 4
“ Baldwin, Fakenham 8	“ Henderson 3
“ Child, Hackney . . 8	“ Sewell (Professor) . 2
“ Carter, East Dereham 7	“ Lucas 2
“ Pons, Waterford . . 7	“ Robinson 2
“ Leigh, Clifton . . 7	“ Stockly 2
“ Mills 4	

The first six gentlemen were in consequence declared duly elected, and were those whose names were proposed by the Secretary.

Mr. Field proposed, and *Mr. Peech* seconded, that *Mr. Gabriel* be re-elected as Secretary. Carried by ballot, without any opposition.

The business of the sitting here terminated, as no other business could be transacted until the whole of the members composing the Council were duly informed of their appointments, and be officially acquainted of the business to be transacted.

An animated conversation took place after the adjournment of the sitting among the members present, the result of which will be seen at the next meeting of the Council.

MEMBERS PRESENT AT THE GENERAL MEETING, 1848:—

Ainslie, J.
Aston, J.
Baker, G.
Braby, E.
Brown, W.
Burley, W. J.
Chester, G.
Cherry, F. C.
Cochrane, J. L.
Charles, E.
Cherry, Arthur
Draper, H.
Daws, H.
Dunsford, J.

Ernes, W.
Field, W.
Fisher, J.
Gabriel, E. W.
Godwin, W. J.
Goodwin, W. J.
Gowing, T. W.
Henderson, A. B.
Hunt, R. L.
Henderson, A.
Hill, G.
Mayhew, E.
Mayer, Thos.
Percivall, W.

Pritchard, R.	Turner, T.
Peech, S.	Turner, J.
Robinson, W.	Vines, R.
Rogers, A. J.	Varnell, R.
Spooner, C.	White, G.
Smith, W.	Wilkinson, J.
Surmon, H. J.	Withers, S. H.
Salter, G.	Weston, J.
Silvester, F. R.	Wadlow, L. H.

And about six more who omitted to enter their names.

RESULT OF ELECTION BY BALLOT FOR SIX MEMBERS OF COUNCIL
IN LIEU OF THE SIX GOING OUT OF OFFICE.

W. Percivall 36	R. Vines 3
W. Robinson 34	J. Weston 3
J. Turner 33	W. Morton 2
A. Henderson 31	G. White 2
S. Peech 25	E. Charles 1
R. Pritchard 25	G. Chester 1
W. Sewell (Professor) . . 6	Mavor 1
F. Gowing 4	C. Spooner 1
G. Varnell 4	Bull 1
J. Siddall 3	J. B. Cochrane 1

GENTLEMEN WHO HAVE OBTAINED THE DIPLOMA OF THE
ROYAL COLLEGE OF VETERINARY SURGEONS, 1848.

LONDON, *April 27.*

John Weston, Smally, Derbyshire.
Isaac Worthington, Charlton on Medlock.
Joseph Swain, Ashton-under-line.
John Roberts, Chipping Sodbury.
Benjamin Cartledge, Bawtry, Yorkshire.
John Thomas Cochrane, Clonmel, Ireland.
John Lane, Hodnet, Shropshire.
John Dickson, Edinburgh.
Robert Cook, Erith, Kent.

May 11.

William Barry Lord.
William Clements, Liverpool.
Charles Nicholson Carter, East Dereham.
Edwin Harrison, Melton Mowbray.
John Cuthbert, Wakefield, Yorkshire.
Page Wallis, Haslingfield, Cambridgeshire.

Francis Ward, Great Haywood.
Benjamin Blunsom Aris, Northampton.
Henry John Fitter, Wolverhampton.

May 17.

John Meredith, Shrewsbury.

EDINBURGH, *April 27.*

Thomas Bell, Darling, Australia.
Edmund George, Chalwin, Sussex.
Andrew M'Farlane, Perthshire.

MISCELLANEA.

A WORD FOR THE DUMB CREATION.

KEEP no dogs that are not wanted for some really useful purpose; discourage in every way their being used as beasts of draught; take care to let them always have free access to water, and never overfeed them.—We may also say a word for birds kept in cages. In hot weather do not hang them out in the sun, unless you cover the cage with a piece of carpet or green sod, or a thick layer of leaves. Let horses, too, have frequent opportunities of quenching their thirst, especially such as are working in towns, and can rarely enjoy green grass.

A LION'S MEAL.

ON one occasion a lion ran off with our cow; the two Barolongs were grudging the lion his fat meal, and would now and then break the silence with a deep sigh, and expressions of regret that such a vagabond lion should have a feast on our cow, which they anticipated would have afforded them many a draught of luscious milk. Before the day dawned, having deposited nearly the whole of the carcass in his stomach, he collected the head, backbone, parts of the legs, the paunch, which he emptied of its contents, and walked off, leaving nothing but some fragments of bones, and one of my balls, which had hit the carcass instead of himself. When it was light we examined the spot, and found from the footmarks that the lion was a large one, and had devoured the cow himself. I had some difficulty in believing this, but was fully convinced by the Baralongs pointing out to me that the footmarks of the other lions

had not come within thirty yards of the spot ; two jackals only had approached to lick up any little leavings. The men pursued the spoor to find the fragments where the lion had deposited them, while he retired to a thicket to sleep during the day. I had often heard how much a large hungry lion could eat ; but nothing less than a demonstration could have convinced me that it was possible for him to have eaten all the flesh of a good heifer, and many of the bones, for scarcely a rib was left, and even some of the marrow-bones were broken as if with a hammer. Having travelled in a circuitous direction, we came to Kurrechane, or, as it is more commonly called, Chuenyane, a noble mountain, in a fine, well-watered country. Here the number of lions was fearful ; and having in this part of the country gorged on human flesh, do not spend their time, if hungry, in looking at the human eye, as some are said to do, but seek the easiest and most expeditious way of making a meal of a man.

The preceding lion story, selected from many more, will serve for the present to illustrate the character of that noble but dangerous creature. As to his being afraid of the human eye, I shall touch upon that subject in another part of my work, when I describe those which have tasted human flesh, for which they ever afterwards retain an uncommon relish. With all their boldness they are sometimes arrant cowards. On one occasion, I remember a man, who, coming unexpectedly on a lion, fainted. The lion raised himself to look over the bushes, and, seeing no one, seemed to suspect a plot, and scampered off with his tail between his legs. It is but justice to add, that the man was no less cowardly ; for on awaking from his swoon, and looking this way and that, he imagined the object of his terror was still there, and, taking to his heels, he made towards the wagon. I have known bushmen, and even women, drive the lion away from the prey he has just seized, by beating their clubs on dry hides, and shouting : nevertheless, by day, and especially by night, he is an object of terror.

Moffat's Scenes and Labours in Southern Africa.

AN ENCOUNTER WITH BABOONS, NEAR THE KWEES RIVER.

HAVING ascended a rugged height, I turned to descend, when, happening to cough, I was instantly surrounded by almost a hundred baboons, some of gigantic size : they grunted, grinned, and sprang from stone to stone, protruding their mouths, and drawing back the skin of their foreheads, threatening an instant attack. I kept parrying them with my gun, which was loaded ; but I knew their character and disposition too well to fire, for, if I had wounded one of them, I should have been skinned in five minutes. Some

came so near, as even to touch my hat while passing projecting rocks. It was some time before I reached the plain, when they appeared to hold a noisy council, either about what they had done, or intended doing. Levelling my piece at two that seemed the most fierce, as I was about to touch the trigger, the thought occurred, "I have escaped, let me be thankful;" therefore I left them uninjured, perhaps with the gratification of having given me a fright.—*Moffat's Scenes and Labours in Southern Africa.*

TAKING TO BUSINESS NAT'RAL.

THE following expression of professional opinion (reported for the *Boston Atlas*) is said to have been given, *verbatim*, by a cow-doctor, who was called as a witness in the late trial of an action in the Court of Common Pleas at Boston. The subject-matter of inquiry was the cause of the death of a certain valuable cow. "I am sixty years old, and live in Scituate—I am a cow doctor—I have followed the business these forty years—I doctor sheep, hogs, and horned critters—I never read no books on critters. I took to the business nat'ral; I doctor in Scituate, Hanover, Hanson, and all about. Mr. Maynard and Mr. Litchfield came to me about this case: I told 'em to give her a pint-and-a-half of castor ile, and, if they had none of that, to give her a pint of lamp ile, or a pound of hog's lard. I went down to see her the Friday before she died—I gave her a dose of thorough-stalk tea, strong—and injections. I went down to see her again on Saturday, and gave her another dose and injection. I thought, if I could start her idees up a little and jog natur, she would get along: she revived up, and I left her.—I went down agin Sunday morning about half-past ten o'clock, and found her ded as a herrin. I was mightily struck up—we skinned her, and snaked her out in the snow; I then split her open and examined her. She had what I called the overflow of the gall and stoppage, and a calf in her which I should say would weigh ninety or hundred weight: there was as much as five buckets of water in her calf bag, and none in her bladder. I opened her paunch, and found I should say a bushel basket full of fox-grass hay, and nothing else. I found a peck or more in her manifold all matted together and dried on. I believe the eating that fox-grass hay gave her the stoppage, and no ile or medicine could start it. My neighbours use this fox-grass hay. It will do for young critters that browse, but I don't believe there was ever tallar enough made by using it to grease a musquito's bill. I never see any critter eat it growing, but have often seen grasshoppers running away from it, for their life. I had some spirits with me when I examined the cow, but, as she did not need it, I took a dose myself."

THE
VETERINARIAN.

VOL. XXI,
No. 247.

JULY 1848.

Third Series,
No. 7.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

[Continued from page 316.]

SHOULDER LAMENESS.

AS the "round bone" or hip-joint has frequently had disease or derangement attributed to it in lamenesses of the hind limb when all the while the seat of ailment has been the hock, so the shoulder, over and over again, has been imagined to have suffered "wrench," or laceration, or injury of some sort, when all the time the seat of lameness has been the foot. At the time and by the persons such mistakes used to be made the different sites and kinds of lameness were not so well understood as they are by veterinary surgeons of the present day; and since both the hip and shoulder-joints are parts removed at some distances from the surface of the body, and are both of them pretty thickly clothed with muscle, disease might exist in either without there being any external signs of its presence, or be imputed to either when it did not exist without much apprehension of error being detected, seeing that no very obvious signs of any cause for lameness were to be found elsewhere. Action is our great guide in directing our attention to the shoulder as the seat of lameness; and though, as far as this goes, we may not have improved any very great deal since the time of old Solleysell, still has so much light been thrown upon lameness in other parts, that, finding additional causes for it, we are less often in doubt concerning it, and consequently less likely to impute it to quarters in which its existence is by external signs indemonstrable. Nothing has reflected brighter light on the seat and nature of lameness in general than the discovery of *navicularthrititis*. Before the navicular joint was known to be so common a site of disease as it has since been proved to be, ignorance or indecision in regard to the seat and nature of lameness found a ready and

secure retreat in a part so concealed from view and touch as the shoulder-joint. The shoulder of the quadruped includes pretty well a fourth part of his body; it occupies a large space, comprehends many and various parts, and is complicated altogether in its structure. The bulk of it is made up of muscles. There are but two bones entering into its composition—the *scapula* and *os humeri*; but the joint they form between them, of the ball-and-socket character, possesses greater variety of motion than any other joint in the limbs; and, moreover, has connected with it a pulley-like bursal cavity, containing synovia the same as the main joint, which, there exist strong reasons for believing is, if not the ordinary, at least a very frequent seat of shoulder lameness. The tendon of the *flexor brachii*—a muscle principally concerned in the flexion of the arm of the quadruped—passes down from its attachment to the scapula within a groove formed between the tubercles upon the head of the *os humeri*, and plays up and down within this groove after the manner of a rope over a pulley; the surfaces both of tendon and groove being coated with articular cartilage and enclosed within a synovial sac. Now, from the circumstances of this muscle being mainly employed in bending or raising the arm, of the known liability of bursal joints, such as this, to get out of order, and of the presumed and pretty well ascertained seat of ailment being the *point* of the shoulder—a part directly opposite to this bursa—there seem good reasons for believing that this said bursa is the especial or usual seat of derangement or disease in shoulder lameness. It may appear strange, or even inexcusable, that in this, the sixtieth year, or thereabouts, of the introduction of veterinary science among us, we should be found making use of language so dubious as this in regard to the site and pathology of the lameness in question. It must be borne in mind, however, that for one case that is in verity shoulder lameness there occur thirty that are not; and that, being a lameness that is commonly curable, or one of which horses, give them time, somehow or other are found to recover, or, at all events, one which they never die of, or are put to death for, we get, in point of fact, little or no opportunity of examining into the state of parts supposed to be diseased; though, we may add, that such facts—and they are mostly of foreign growth—as stand on record shew the shoulder-joint, if not the *bursa*, to be the seat of disease.

THE FRENCH VETERINARIANS call shoulder lameness *écart*, because they say it has the effect of causing the horse “*écarter le membre du thorax*.” And Barthélemy—one of their best authorities—asserts that the scapulo-humeral articulation, with its capsular ligament and investing muscles and tendons, is the seat of the lameness.

DE NANZIO, Director of the Veterinary School of Naples, was of opinion, likewise, that the shoulder-joint was in fault, and for that reason recommended his operation, as performed for hip-joint lameness, as applicable in this case.

M. LEBLANC, our professional friend and associate, for whose opinion we entertain the highest respect, has informed us—in THE VETERINARIAN, vol. x—that “old lamenesses arising from lesions of the superior divisions of the extremities are oftenest to be attributed to diseases of the articulations, and more especially to distention of the capsular ligaments.”—“The capsular ligament of the shoulder-joint loses its natural aspect; is in some parts diminished in thickness, while in others it is increased in substance; its interfibrillary cellular texture is indurated; the tendinous fibres are no longer distinct; the surrounding mass has assumed a variable colour—oftenest a yellow tinge mingled with red points; the neighbouring cellular tissue is likewise sometimes indurated, at other times osseous.”—“The synovial capsule and the synovial fringes (*glandulæ Haversii*) are always diseased—thickened, and of a mingled yellow, black, and red colour. The synovia is thicker than in health, and of a deeper colour. The articular cartilages are diminished in thickness; sometimes they are abraded in various places where they have a yellow hue. The ends of the bones are sometimes deformed and out of their places, displaying false articulation. Finally, the muscular tissue surrounding the shoulder-joint is found discoloured and wasted, especially when lameness has been of long standing.” Such is, or was, Leblanc’s account of the post-mortem appearances. They evidently apply, we should say, rather to *chronic* shoulder lameness than to common or recent disease.

THE SYMPTOMS OF SHOULDER LAMENESS are—1st and negatively (in the absence of signs of other lameness) that the horse neither points with the foot of the lame limb, nor usually stands upon it differently from what he does upon the sound leg; 2dly, and positively, that, in trotting, he displays a movement in the fore leg different from the action of a horse lame in the foot or elsewhere.

SOLLEYSELL was perfectly well acquainted with the latter: his description includes pretty well all observation since his time has taught us concerning it. His name for the ailment was “shoulder-wrench,” “shoulder-plaint,” or “shoulder-sprain.” And he tells us, “’tis hard to discover where the lameness is if you did not see him get it, and *if the horse does not cast his leg outwards or make a circle with it, instead of advancing it straight forward*; for that is almost an infallible sign that the grief is in his shoulder.”

PAIN or inability evidently intimidates or prevents the horse

from lifting and projecting the lame fore limb in the manner and with the freedom he does the sound one—"he cannot get it forward," as horse-folks say; i. e. forward in a direct line without pain, to avoid which he, as Solleysell has truly described it, "makes a circle with it," brings it forward with a sort of sweep, and perhaps some trail of the toe upon the ground as well.

But it may be endeavoured to elicit pain by pressing or squeezing or moving about the shoulder. Solleysell tells us to "take hold of the fore limb, and make it go backwards and forwards, that we may perceive how the shoulder can be moved, and whether or not the horse does not complain of pain or shrink while such motions are being performed." All this is usually done nowadays, and by veterinarians; though we must confess our diminished faith in tests like these compared with such as are afforded by action, and the absence of any cause or suspicion for lameness elsewhere.

DIAGNOSIS. Strange as it may appear to persons out of the veterinary profession, it is notorious enough to those in it, that no two kinds of lameness have so frequently been confounded as foot lameness and shoulder lameness; the best explanation we can offer of which seemingly unpardonable error in judgment, probably, is to be found in the fact of there being "nothing to be seen" to account for the lameness either in one or the other. "The usual way," says Solleysell, "to know whether the grief be in the shoulder or foot, is to observe whether the lameness be increased or abated by exercise; for if it be in the shoulder the horse will halt least while he is heated with riding; but if in the foot he will halt most when he is ridden." This, so far as it goes, is good. But we must have other marks of distinction. We must observe the *gait* in the trot; mark whether the lame limb be carried outward or not. Next we should inquire if there be any pointing of the toe, any hurt of the foot, or any signs of shelving in or rimminess of the wall of the hoof, symptoms which, in the absence of the sweep of the limb in action, would at once draw our attention to the foot. Furthermore, the same horse may be made to perform movements especially trying to the shoulders, such as running round a circle while held in hand, or passaging, or backing, some one or all of which may possibly more perceptibly elicit the lameness or expression of pain. As for "wasting of the shoulder," a symptom by farriers and grooms in general laid great stress on, it is at best but a *remote* consequence of lameness, which may be in the foot or leg, and not necessarily in the shoulder: the explanation of the "wasting" being simply the loss or diminution from absorption of the fleshy fibres of muscles, which, instead of having their healthful exercise, are compelled to be laid up in a state of inactivity, or even absolute repose.

Lastly, we must bear in mind, that the *knee joint* may be the hidden and mysterious seat of lameness, and that we may be referring that to the shoulder or foot which all the while lies concealed within or about the knee. Mr. Arthur Cherry's papers, inserted in *THE VETERINARIAN* for 1845, instruct us how to search for diagnostics of this. Verily, there is, we are sorely afraid, after all, about the seat of lameness—"more things than are dreamt of in our philosophy." Nothing but steady observation, and faithful and frequent report, can clear up these matters; and this veterinarians are, or ought to be, setting their minds to the performance of. Progress in our knowledge after such a manner, it is true, cannot be but tardy; once attained, however, it will prove of a character that will be sure ever afterwards to serve us in practice.

THE CAUSES OF SHOULDER LAMENESS are all comprehended under *injury* in some or other form: we have no notion of the production of lameness of this description apart from some wrench, sprain, stretch (*écart*), laceration, contusion, &c. of the shoulder; hence a slip-up, a false step, an over-strained gallop or leap, a violent tugging or pulling of the limb, occasioned by the attrapment of the foot in a rut or rabbit-hole, a collision against any hard or unresisting body of the point of the shoulder, any thing, in fact, that may outwardly injure the horse or may occasion the animal inwardly to injure himself, may prove the cause of a shoulder lameness.

In riding-school and military practice there is one particular movement which, carried to excess, is exceeding likely to cause shoulder lameness, and that is what is called shouldering-in and shouldering-out. Veterinary surgeons in the army see such cases occasionally; though, on inquiry, they will generally prove referable to abuse of the said practice, and not to the moderate or judicious performance of it. Some years ago I was employed in attending the horses sent to the cavalry dépôt then established at St. John's Wood. Every now and then a horse was brought to me lame in the shoulder, and, on one occasion, cases of the kind became so prevalent that I was instigated to make inquiries into the causes of them, which, with very little trouble, and less demur, I found to be the strained exercises of shouldering in and out to which such horses had been put in the riding-school. Simple withdrawal of the lame horses from their work, and resting them in their stalls, restored them to soundness; and a word of caution in the proper quarter put an end to the evil.

THE TREATMENT OF SHOULDER LAMENESS will have to be conducted on those general principles which are our best guides in all similar affections. In making our selection out of the many

remedies within our reach, attention should be paid by us to the *history* of the case submitted for treatment: its duration, and the mode in which it occurred, when ascertainable, may very likely cast some light upon our restorative plan of procedure.

REPOSE of the lame limb is indispensable: without such a precautionary measure all remedies will have little chance of succeeding. On this account a stall is preferable to a box for the lame horse; and he should be fastened up in it so that he cannot lie down or move about much. Side-reins are preferable to a single strap or rope.

FOMENTATION of the shoulder, in a recent case, we are of opinion is preferable to the application of cold or refrigerant lotions; but then, we mean fomentation *persisted* in, and directed in particular to the *point* of the shoulder. It being impossible to confine a hot poultice on the part, an ample covering of spongio-piline will be found an excellent substitute, seeing it may, by very simple contrivance, be made to closely cover the entire surface surrounding the point of the shoulder. The piline poultice should be replaced by a fresh hot one every hour.

A DOSE OF CATHARTIC MEDICINE is commonly given in such a case, and, we think, while the lameness is yet recent, with decided good effect: only let the dose be strong enough to purge the animal without there being a necessity for exercising him.

TOPICAL BLOOD-LETTING, so far as that can be carried into effect by drawing blood from the plat vein, is advisable in most cases—in severe ones indispensable. And the fittest time for its performance is the day the patient is sick and purging from the physic. From six to eight or ten pints of blood, according to the severity and duration of the case, should be abstracted.

COLD, in the form of refrigerant or evaporating lotions, or through the application of ice, may, if preferred, be substituted for the fomentations: for our own part, however, as we stated before, we like the soothing and emollient plan the best. At the expiration of a week of treatment of this mild and emollient description, the horse may be seen out of his stable, first in a walk, then, for a few yards, in a trot: caution being taken to put a stop to the trot the moment any lameness re-appears, indeed, to exercise of any kind, unless he should be found to go sound, in which case a walk out for a few minutes, providing he do not “jump about,” and risk relaining himself, will be beneficial. In the case of there being no amendment, or not that amount of “better” that had been expected, some change of treatment should be thought of. When hot and cold applications have failed to afford relief, sometimes

A STIMULATING LINIMENT, well rubbed in over the point of

the shoulder, has been known to do good. The one we use is the following :—

R. Liquor. ammoniæ
 Ol. olivæ
 Ol. terebinthinæ āā . . . ʒij
 Saponis mollis . . . ʒj—M. S. A.

This liniment takes immediate effect, and sometimes for a short time annoys the animal so much that he requires to be held in hand for a few minutes, or to be fastened up short with the rack-chain. The first perfrication will not move the hair; the second, however, will be apt to do this; the third almost certain to do so: knowing which, it will be to act accordingly.

A BLISTER entirely over the point of the shoulder is, however, the remedy most likely to prove efficacious in a case wherein mild means have conferred little or no benefit; the objection to such a remedy being the certain removal of the hair, and the consequent laying-up of the horse for a much longer time than consent in this stage of the lameness can always be obtained for; though, in the end, it may prove—as it often does—really a saving of time. Three or four weeks is the shortest period you can reckon for a blister to work itself out, even if it be sponged off with hot water as soon as it has taken effect—which in this case ought to be done: and then, even though the horse may prove sound, the shoulder will probably be left bare; though that, of course, will depend on the strength and composition of the blister used. What will frequently amount to a blister, and at the same time will leave the hair unloosened, is the application of the *acetum cantharidis*. A painter's brush answers best to apply it with, the hair being simply wetted with the essence by stroking it with the brush in the direction in which it grows. This, we repeat, will frequently be found to *sweat* the skin without stirring the hair; and as such is, as a vesicatory, extremely valuable to us, and in particular in private practice.

No trial of the horse, not even a run-out, can be permitted for at least a fortnight after the application of the *acetum*; and then, should amendment be still imperceptible or insufficiently apparent to satisfy for what has been done, providing we see no reason to alter our opinion in regard to the seat of lameness, a severe and extensive blister had better be at once applied over the point of the shoulder, and the animal kept tied up in the stall until such time as it has worked off, or until the swelling in the limb be such as to call for his removal into a loose box, where he must remain for some weeks: time now being absolutely necessary for the working-off of the blister, and the carrying into effect those changes which, in consequence of its application, we have reason

to believe are going on in the parts deranged or diseased, towards the righting or restoring of the same.

THE ACTUAL CAUTERY is recommended by Professor De Nanzio, of Naples, to be used after the same manner for shoulder lameness as he has found it so effectual in hip-joint lameness (*see VETERINARIAN for 1837*), which consists in making incisions through the muscular and cellular tissue, after flaps of skin have been dissected back, down to the diseased joint, to the immediate coverings of which a budding iron, moderately heated, is to be three or four times leniently applied. The flaps of skin are then to be returned into their places, and simple or no dressings whatever used to the wound.

THE POTENTIAL CAUTERY has likewise met with continental advocacy. In the "Transactions of the Royal Veterinary School at Lyons for the Year 1840-1," published in THE VETERINARIAN for 1842, we are informed that—"Lameness of the scapulo-humeral and coxo-femoral articulations have in numerous cases been satisfactorily treated with chemical caustics. Fifty-three horses have been submitted to the treatment, thirty-five for shoulder lameness, and eighteen for hip-joint lameness. All have been cured save three, out of which two had been a long time lame, and one whose case was out of the ordinary character. Either the bichloride of mercury or the arsenious acid may be used; though decided preference is given to the former. A small piece, weighing gr. ij, is introduced underneath the skin at the point of the articulation, and suffered to remain there eight-and-forty hours; from which neither the tumefaction that may follow, nor the absorption of the salt, nor the state of the wound, need cause any alarm. One untoward result on occasions takes place. The purulent matter generated insinuates itself underneath the skin, and causes a partial detachment of it from the tissues beneath. The insertion of a tent or seton, however, into the dependent pouch will speedily remedy all. Some persons use the sulphate of copper; but this is far less effective than the mercury. And the arsenic is more objectionable still, from its uniformly occasioning a good deal of tumefaction. Now and then it has produced poisonous effects.

SETONS—which are no more than modern and for some cases improved forms of the old *tents*, *plugs*, and *rowels*—are by some practitioners employed in the place of blisters. To blisters, however, they are decidedly inferior both in point of activity and efficacy. If used at all, they might be made trial of in cases that had become *chronic*, and seemed to require something in the shape of a perpetual issue. After all, they form but a link in the long chain of counter-irritants; and are from their nature calculated

rather to do good by their unceasing and protracted action than from any specific virtue resident in them.

RELAPSE. In every case of lameness, almost, it is hardly less our duty to change that state as soon as we can for one of soundness than it is to guard against relapse of ailment; for not only is a relapse always less promising to treat than an original case of lameness, but it lays the practitioner open to taunts and reflections on the part of his employers and others as having not *cured* but simply "patched up" the case. Now, shoulder-lameness, like navicularthrititis, happens to be a case very likely to return should the subject of it be taken back too shortly after soundness has been restored; and therefore it behoves the practitioner to keep his patient in hospital, or a rest at least, as long as he can; at all events, to caution the owner of the risk he runs in disobeying this wholesome injunction. In the course of our practice, we have known horses who have had, as it were, periodical returns of lameness in the shoulder; at least, who have had their lameness come on as soon as they have been put to the same hard or violent exertion as in the first instance occasioned it, even though a twelve-month or more has intervened between the application of such exciting causes: it being evident enough that the lameness would have relapsed before, had the horse been sooner put to his trying work. In the majority of cases, relapses, if they occur at all, take place on the horse's first being returned to work; and if not then, pretty confident hopes may be entertained they will not happen at all. In a state of convalescence there is no better habitation for the patient than a loose box: to the little motion he can take in which may be added, as he progresses towards soundness, walking exercise in hand, at an hour of the day and in a situation, if possible, when and where he will hear and see nothing to cause him to "jump about," and so to run a hazard of re-laming himself.

CASE OF ADHESIONS OF THE INTESTINES,

PREFACED BY SOME REMARKS ON PASSING PROFESSIONAL EVENTS.

By JOHN TOMBS, M.R.C.V.S., Stratford-on-Avon.

Sir,—HAVING occasion the other day to refer to an old case-book, I stumbled over the following case, which I intended recording in THE VETERINARIAN at the time it occurred, but something

transpired that prevented my doing so; however, I now send it you for insertion in your Journal. And I take this opportunity of expressing my disapprobation respecting the course adopted by Professors Sewell and Simonds, viz. that of giving similar instructions, and that gratuitously, to the members of the Royal Agricultural Society, to which they give their pupils at the Royal Veterinary College. As the pupils *pay* for their instruction, and are the support of the Professors, such proceedings are extremely unjust to them, and will, undoubtedly, be manifestly injurious when they come to embark in practice; since many agriculturists will, from the knowledge they gain from the Professors, treat their own sick stock. It is a crying evil, and ought to be taken notice of. I regret to say, it is my opinion that the Professors have not the future welfare of the profession and pupils at heart.—I must now allude to another subject, viz. that of the suspension of the bye-laws of the Council as far as relates to the apprenticeship clause. I trust it is simply a matter of expediency, as those laws should not be abrogated; as I know full well, in common with other country practitioners, that it is impossible to obtain, under existing circumstances, that knowledge for country practice at the Veterinary College which is imperatively necessary to enable them to pursue their vocations with credit to themselves and advantage to their employers. I need not now repeat my reasons for stating this, having done so in a former communication to you.

THE CASE.

Oct. 15, 1834.—Visited a horse, the property of a farmer, which had been sick four or five days. He was standing back as far as he possibly could from the manger, looking towards his flanks, and had been purging for two days; he is very thin. As the pulse was strong and rather hard, I abstracted three quarts of blood, and ordered creta preparata and opium to be administered repeatedly.

17th.—Purging ceased; pulse 60, and hard; breathing quickened; he is still in pain, and very dull; refuses food and water. Bleed again; blisters to abdomen, and give sedatives.

19th.—Much the same—continue treatment.

20th.—Suddenly attacked with griping pains; pulse 70, and weak; lies down and looks back; bowels slightly constipated; fomentations to abdomen. Give ol. ricini, tinct. opii, &c.

22d.—Free from pain; pulse quick and weak; feeds a little. Give febrifuges.

25th to Nov. 4th.—Pulse varied from 50 to 54; the appetite

gradually improved; the breathing was tranquil, and every appearance of ultimate recovery, when he was again dreadfully griped (with the pulse ranging from 90 to 104), and remained so at intervals until the 6th of November, when he expired.

On opening the body after death, the contents of the thorax were healthy. Not so with the abdomen; there were a few patches of inflammation on the ileum; the lower part of the cœcum was diseased, thickened, and firmly attached for six inches square with strong tendinous cords to the peritoneum of the right side: between each cord was a collection of condensed matter, containing a worm an inch and a half long; the portion of the colon that doubles back against the diaphragm was thickened and diseased, and firmly grown to the diaphragm, similar to cœcum to the side. Adhesions had taken place inside the colon: the diseased portions of intestines were œdematous internally. Rectum considerably inflamed; lymphatic glands of mesentery enlarged. The small and large intestines contained an innumerable quantity of large tape worms, and some alive, although the horse had been dead twelve hours before he was dissected. It is rather singular that not one worm was voided during the whole time of his illness.

EXTRAORDINARY FACT IN UTERO-GESTATION.

By the same.

In conclusion, I will record an extraordinary fact in nature. A farmer, about eight miles from here, has a brown cart mare which had gone the usual period of utero-gestation—had labour pains with a full-sized udder—the pains continued an hour, then ceased; the mammæ got small again. She was quite well for thirty-one days after, when she brought forth a fine living foal on the 22d May this year.

P.S. I do not consider it objectionable for the Professors or private practitioners to acquaint agriculturists with the best mode of the domestic management of cattle; but advising them as to the medical treatment of diseased animals I protest against: and if this system is still persevered with, we shall soon be like "Othello;" our occupation will be gone—that is, in the country.

14th June, 1848.

DISEASES OF THE HEART, LIVER, BRAIN, AND INTESTINES IN LAMBS.

By J. P. VINCENT, M.R.C.V.S., Devizes.

To the Editor of "The Veterinarian."

Sir,—It affords me pleasure to forward the following account of disease in lambs for the pages of THE VETERINARIAN, should it be deemed sufficiently interesting, inasmuch as it so seldom happens that professional men are called upon to render service in the sheepfold; and especially as the owner, the shepherd, and others, had the candour to admit, that, until I pointed out to them the nature of the malady, they were in total ignorance of it, and of the cause of death.

April 29, 1848.—By desire I went to the house of Mr. Cuff, living at Rushall, he having within the last month lost 143 lambs. His flock of ewes, in number 493, lambed in the month of February. After lambing, they were first put upon Sweed turnips for a fortnight or three weeks; a fortnight upon young turnips, and subsequently upon water meadow; the lambs having troughs containing pollard. Shortly after being upon water meadow, some of the best of the lambs now and then died. The deaths were observed gradually to increase: the symptoms were, suddenly discontinuing to feed, being seized with a giddiness, running round, falling, and dying after about half an hour. On the morning of the 28th, Mr. C. had the very great mortification to behold no less than 37 of his best lambs thrown out of the fold dead. On the 29th, thinking the keep was too stimulating, he had the flock removed to the downs; and on the same day, as above stated, he sent for me, to make a few post-mortem examinations, so as to arrive at the cause of this sad mortality, and to endeavour, if possible, to prevent its further progress. Five lambs were then submitted to my inspection. Conceiving, from the symptoms stated, that the brain was the seat of the disease, the bones enveloping that organ were carefully removed from the heads of two. In each, the only morbid appearance was some dark-coloured blood in the longitudinal sinus, a general turgescence of the bloodvessels of the brain, and of the plexus choroides in particular: there was no extravasation of blood nor accumulation of serum in the ventricles. Upon laying open the chest, and breaking back the ribs, in every instance, without exception, in the best lambs—and altogether, on that and other occasions, the carcasses of many were inspected—the lungs presented a congested appearance, not inflamed, but simply charged

with black blood; the pericardium was *invariably* found distended, it seemed almost to bursting, with a transparent fluid, serum, and a clear jelly-like consistence, coagulated lymph. The serum in most cases preponderated in quantity; the lymph was in a consistent mass, and about equal to and not unlike the white of a hen's egg; the pericardium had not an inflamed appearance, but was usually of its natural colour. The hearts also presented many varieties of disease, as hypertrophy, carditis, and endo-carditis, and softening. In one case of hypertrophy and endo-carditis in a fleshy lamb, the walls of the ventricles were thickened and dark coloured; the internal lining membrane of the ventricles also dark coloured, and presenting spots of ecchymosis; the external covering of the heart exhibiting the same characteristics. The apex was also nearly black, as though bruised by striking against the ribs. Upon cutting off about half an inch of it, I found the same dark colour pervade its muscular substance. I also found the livers of the lambs which died of hydrocardia enlarged, inflamed, and softened. Some of the lambs died of scour. These were all in low condition. But the heart in these also appeared to have sustained the brunt of the attack originally. It was contracted and indurated, and occasionally of a deepish transparent blue colour, increased in intensity from the apex to the base; the serum and lymph in the pericardium small in quantity (absorbed); the lymph flaky, and in two or three instances adhering. They appeared to have recovered of hydrocardia only to suffer from disease of another kind, and perhaps equally fatal, dysentery. The treatment resorted to first, as a prophylactic, was to remove the flock from the water meadows to the downs, from high keep to comparatively low, the lambs with scour being allowed gruel. Therapeutically, all of them had opening and diuretic medicine in combination, and to those in high condition, the subjects of hydrocardia, it was repeated at intervals of two or three days, until amendment was perceptible. It was not many days before some of them were seen skipping and running about as usual. I found the pulse average about 120. In all I tested, it amounted to nearly the same number of beats: from one which ranged between 130 and 140 I drew blood; it did very well. The lambs with scour, after having each a dose of opening medicine, were treated with the sheep and calves' cordial named in the treatise upon sheep by the late Mr. Youatt. This they had for three or four following days. I had the satisfaction to learn, that, subsequently to the first night, after taking the medicine, when five died, but one or two died nightly; and the deaths proceeded at this rate for, I believe, some three or four weeks: which, in fact, I had previously prepared the owner to expect, conceiving it highly improbable that many of the poor,

weak, emaciated lambs suffering from scour—dysentery, I should say, by the appearance of the mucous membrane of the intestine—could possibly recover. They were little better than living skeletons.

Adverting to the cause of these maladies, it will be instructive to note certain circumstances which may be fairly advanced as likely to have been conducive. The weather had been for a long period extremely wet and cold, and sometimes attended with frosty nights. The water-meadow was also, I am told, unusually wet. The lambs, at the same time, were living high—were, in fact, in a state of plethora. The wool retaining much of the moisture it was exposed to, and the temperature of the nights being low from continual wet and frost, the skins of the animals became, in common parlance, chilled, and consequently prevented performing their customary secretions: there was, in short, a redundancy of blood thrown upon the motive power of the heart. It became over-exerted; and, as over-exertion is a common cause of inflammation, so, in these lambs, the several varieties of disease, all attacking the same organ, the heart, are thus accounted for. And it is easy to be comprehended, if the heart could not dispose of the blood accumulating in its right side, that the brain and liver, by consequent accumulation of blood in the anterior and posterior cavæ, backwards from the heart, the weight of the column in each cava offering a resistance to the propulsive power of the vessels of these organs, would sustain consequent venous congestion, and, possibly, inflammation.

Had Mr. C. sent for proper professional attendance early, after losing some of the first cases, I have no doubt that, by judicious treatment, change of diet, bleeding, &c., the remainder would have been generally saved. It was by mere accident, in fact, that I saw them at all. Mr. C. casually naming to me at market that he was losing many of his lambs, I suggested that, if his ill-luck continued, he had better let me see them.—Is it not lamentable that, in this age of onward progress and discovery, of scientific attainment, and, what is more to the point, of agricultural associations and improvement societies, the veterinary surgeon, excepting as regards his knowledge of the diseases of horses, and occasionally of cattle, is a shelved, inutile, forgotten piece of machinery? not unfrequently learning, in an indirect manner, that, in other respects, he is not considered competent, or to possess the requisite knowledge; often placed in competition, and unsuccessful competition, too, with a mere man of receipts, nostrums, and unblushing effrontery. I do not believe that the evil rests with the veterinary body: it rather remains with the agriculturists. The charge or incompetency, so frequently made and reiterated, I am of opinion

is perfectly gratuitous and groundless. Individual instances of blunderers and blundering can, of course, be always adduced; but the like appertains to every profession and calling. Miracle-workers we are not: all I contend for is, to allow us a fair field for the display of our skill; and it will soon become an important fact, that we are equal to more than frequently we have now the chance to accomplish, and to all that could rationally be expected from the practisers of the veterinary art.

I am, Mr. Editor,

Your most obedient servant.

June 14, 1848.

CASE OF HOCK LAMENESS AND FRACTURE OF THE TIBIA.

By J. BROAD, M.R.C.V.S., Market-street, Paddington.

IN THE VETERINARIAN for the last month is recorded a very interesting and singular case of elbow-joint lameness, by the worthy Editor of that Journal, the reading of which brought to memory a somewhat singular case of hock lameness that very recently occurred under my own observation. Its history may not be without a share of interest to the readers of so valuable a work.

On the 24th of May last I was requested to examine an aged brown mare, belonging to Mr. E —, Paddington, which was reported to have been going "stiff behind," as the phrase goes, for some considerable time; but, as it passed off after she had gone a short distance, no further notice was taken of it. Eventually, however, the lameness increased to that degree that she was scarcely able to perform her work. Upon having her led out of the stable, I could easily perceive that the off limb was the one principally affected. So lame was she on it, that she would scarcely touch the ground with it when made to move. I was informed that the reverse had been the case for nearly a week previously, viz. that the *near* had exhibited all the symptoms now present in the off. As to the hocks being the seat of the disease, there did not remain a doubt; since, although no enlargement could be detected in the off hock, yet a small bony enlargement in the seat of spavin was present in the near, and considerable heat existed in both.

TREATMENT.—She was removed to a loose box, prepared for a full dose of physic, and the antiphlogistic plan was adopted for several days, with, however, but slight effect. On the 29th the owner wished to have her fired. She was, consequently, cast the following day, and the operation performed on both hocks, after

which she was unshackled and allowed to rise, which she readily did. But, as soon as she was up, and caused to move, I instantly made the observation that her thigh was fractured. On closer examination the fracture could be detected at the inferior end of the tibia. Shortly afterwards I waited upon the owner to inform him of what had happened, and the circumstances under which it occurred. As the best course that could be adopted, I advised her destruction. The first question that arose was, *how* did the fracture occur? The second, *when* did it take place? The conclusion I arrived at, and the opinion I expressed to the owner before she was destroyed, was, that the fracture had been in existence for several days, although the parts had not become displaced until she was cast for the operation. I felt no hesitation in asserting that I believed it might have been caused during the night previous to my examining her, probably either by lying down or getting up, seeing she had lain down that night, a thing she had not done for several nights previously. She had performed her usual work in an omnibus the evening previous to my seeing her. The horse-keeper informed me that she had been very nearly as lame in the near limb for a week past. I made a very careful examination, but did not for one moment suspect a fracture.

POST-MORTEM EXAMINATION shewed an oblique comminuted fracture of the tibia in the off limb, extending across the whole length of the inner groove of the inferior articulation of that bone, and upwards throughout the body of it, eight and a-half inches in length. The synovial membrane covering the surface of the inner groove, and likewise the ridge between the grooves, were highly inflamed, and of a purple appearance. The synovial membrane of the astragalus was slightly involved. The texture of the bone, commencing from the inferior articulation, extending into the body of it for about an inch, was extensively diseased, and softened in structure. I examined the hock and tibia of the near limb with a view of finding the cause of the extreme lameness which had been present in it. The hock exhibited a small spavin; but the tibia presented in every respect, excepting the fracture, the disease as described in the tibia of the opposite limb, only in a severer form. In fact, ulceration had commenced its work both on the lower surface of the tibia and also on the corresponding articulation of the astragalus. There was, extending across the inner groove of the tibia, a line into which I could easily press a scalpel to the depth of an eighth of an inch. Upon the outside of the bone could be traced a crack, commencing from the articulation and extending upwards, for the space of two inches, evidently exhibiting a strong disposition to fracture in this bone. Upon the outer surface of it, and contiguous to the crack, Nature had commenced throwing out

a spurious kind of ossific deposit, with a view, probably, of strengthening the part. The fractured edges of the bone were as smooth on the most prominent parts as if they had been polished, evidently shewing that the fracture had happened previous to her being operated on; though it could not have been in existence any great length of time, since I examined her on the morning of the 24th, and ascertained she had performed her usual work on the evening of the 23d. Had the fracture not taken place, it would not have failed to have proved a very tedious case to the practitioner.

ON MEDICINES THAT ACT ON THE UTERUS.

By W. A. CARTWRIGHT, *M.R.C.V.S.*, *Whitchurch, Salop.*

PARTURIENTS are medicines which are supposed to cause contractions of the uterus: they are, ergot of rye, rue, savin, and saffron. Some botanists believe there are plants that produce abortion by acting on the uterus, viz. all the tribe of *ranunculacea*, with the *tormentilla officinalis*, and the *colchicum autumnale*. But I am not aware that English veterinarians have ever employed any other medicine than the ergot of rye for this purpose. Mr. Morton, in his "Manual of Pharmacy," says, "that the *secale cornutum*, ergot of rye, or spurred rye, is a curved cylindrical and striated body, usually about half an inch in length; externally of a deep violet colour, and internally whitish; that by some it is thought to be a disease of the grain produced by the puncture of insects; by others a fungus or parasitic plant, which locates itself in the ovary of many of the grasses, and is found more commonly upon rye than upon any other grain. The last is the most prevalent opinion. The market is principally supplied with it from North America." In the hot summer of 1826 a great quantity of it was gathered about four miles from here, and I have tried it, after having been kept for many years, with apparent good effect. Although my practice has been pretty extensive in cases of parturition, I have never had occasion to use it very frequently; since I have generally found, by introducing my hand up the vagina into the uterus, that uterine action has been induced.

By some veterinarians it is doubted whether the ergot of rye really has the power ascribed to it, of acting on the uterus; but I think the generality of human and veterinary accoucheurs are decided about the good effects produced by it. That it should always have the desired effect is unreasonable to expect, when we consi-

der in what different states the digestive organs, or the nervous system, may be at different periods. Besides, we know that every medicine at times is variable in its operation.

M. Bonjean, of Chambery (see *VETERINARIAN*, vol. xv, p. 665), has determined by numerous experiments, 1st, that the ergot gathered on the first day of its formation has not the poisonous properties which it has when taken on the sixth day; 2d, that a heat of 212° Fahr. produces the same effect as gathering it too early; and, 3d, that fermentation deprives it of its properties. These circumstances serve to explain the want of success which sometimes attend its administration.

M. Bonjean has discovered in it two active principles:—

1st. The oil of ergot, of a uniform consistence, a yellow colour, an acid flavour, and possessing poisonous properties in a high degree.

2d. The aqueous extract, which is obtained by treating it with water, either deprived of its oil or not, of a brown colour, a thick consistence, and a musty smell.

It is soluble in water, and can be formed into mixtures, syrups, pills, &c. It possesses decided anti-hæmorrhagic properties. It exerts a specific influence on the uterus, occasioning a contraction of that organ.

Mr. Morton also says, “that its activity appears to reside in its investing tunic, and, as this may be rubbed off or washed off by rains, the remaining part is inert; and that, to insure its good effects, it should be carefully kept in stoppered bottles, and never used after it is one year old. Also, not to pulverize it until it is wanted.”

The ergot of rye should not be given unless there is some torpidity in the action of the uterus, or that its action has subsided; nor when there is malformation of the pelvis, or any tumours in the vagina tending to impede the passage of the fœtus; nor where there is rigidity or scirrhus of the os uteri. It will also be highly imprudent to use it where there is emphysema of the fœtus to a great extent, or when the fœtus is a monster or of enormous size; nor should it be used until the feet and head have fairly entered the pelvis, and the vagina and soft parts are flaccid and properly lubricated.

The medicine will generally act after a dose or two has been given, and frequently in half an hour or an hour's time.

As the ergot has but recently been introduced into veterinary practice, I may as well give you the experience of those that have used it.

IN THE MARE.—In the 12th volume of *THE VETERINARIAN*, p. 288, a veterinary surgeon relates a case in a mare, wherein he

gave secal. cornut. sem. anisi, sem. carui, āā ʒij, and soon after she produced another foal. She had brought forth one before.

Mr. Richardson, of Lincoln, Mr. Morton informs us, has used it in the mare with success, and he observes that it is the only instance he has known of its being employed. Mr. Morton advises ʒij to be given to the mare every hour; M. Moiroud, ʒj.

IN THE COW.—In the 7th volume of THE VETERINARIAN, page 72, Mr. Allinson, of Idle, gave in a decoction two half-ounce doses every hour with success. To another cow that had calved and cleansed eight days before, but continued straining, and in whose case he was convinced there was another calf, he gave four doses of a decoction, containing ʒij, every hour; and after the last dose was given, a dead calf and the placenta were removed.

In THE VETERINARIAN, vol. ix, p. 262, Mr. Dickin, V.S., Kimbolton, gave three two-drachm doses to a cow that had been assisted by a blacksmith to calve, but who had left the calf partially out, and had been in this disgusting state for three weeks. The medicine had its desired effect. Mr. Morton recommends ʒij to ʒiv; Mr. Youatt, ʒij every hour.

IN BITCHES.—In THE VETERINARIAN, vol. vi, p. 484, Professor Dick steeped ℥j of the ergot in ʒij of water, and gave one third of the infusion as a dose. Two doses were sufficient every half hour. Injections of soap and water being, however, used also, the effects became doubtful.

In vol. vi, p. 527, Mr. Simpson, of Southampton, gave seven-grain doses to two bitches. After having given three doses every half hour, the bitches pupped.

In vol. viii, p. 654, M. Moiroud recommends ʒj to be given.

In vol. xv, p. 330, John Harrison, Esq., Surgeon, Chester, gave ʒij of the tincture to a little terrier bitch that had produced a dead pup the day before, but was exhausted by straining. In twenty minutes it operated, and she produced another dead pup, and did well. Mr. Morton gives from gr. v to gr. x.

IN THE EWE, M. Moiroud orders ʒj at a dose; Mr. Morton, from ℥j to ℥ij.

IN THE DEER, Mr. Youatt has given ℥j every two hours to a Samber deer, and it produced contractions.

IN THE SOW.—I have given fifteen-grain doses to the sow with decidedly good effect.

From the foregoing observations I think the following doses will be found to answer our purpose, but, of course, they must be regulated according to the size of the animal, and repeated as often as necessary; and if it should not have the desired effect, I should not hesitate to increase the dose.

Mare...From 3ij to 3iv
 Cow....From 3ij to 3iv
 Ewe....From 3j to 3j
 Bitch...From gr. v. to gr. x
 Cat.....From gr. i to gr. ij
 Deer....From 3j to 3ij
 Sow.....From gr. x to 3j

The ergot should be given in powder in some spiced ale, or, in short, in almost any thing, every half hour or hour, until uterine action is induced.

It appears from Bonjean, that it is very much diminished in strength if boiling water is poured on it, consequently infusions are not to be recommended: yet, from what has been said, it will be seen that infusions have been made, and given with success.

I am very fearful, although ordered not to use it when it is above a year old, that it will be difficult to meet with it, or to distinguish it from that which is older. I am inclined to believe that its virtue is not lost when it is above a year old: I should also suggest a trial of the tincture, and I think it ought to find a place in our pharmacopeias.

INTUSSUSCEPTION OF THE SMALL INTESTINES IN A FOAL THREE WEEKS OLD.

By the same.

ON the morning of the 7th of June, 1848, a foal, three weeks old, the property of Mr. Geo. Bradshaw, of the Swan Inn, in this town, was found dead in the field. It was seen to be well about six or seven o'clock the night before, consequently could not have been ill for above twelve hours.

Examination.—It was warm. I could not detect any injury in any part of the body. On laying open the abdomen, I discovered that some of the small intestines were much thicker than others: after removing them from the abdomen I examined them more carefully, when I found that they were, in twelve or fifteen places, intussuscepted. At one place a portion of the small intestines had entered another for at least twelve inches; in another, for six inches, and in many others for half an inch or more. The intestines were pretty much of their natural colour, and in no place were they so strangulated but what they could be drawn out of each other, nor were they at all in a state of mortification. There were marks on other parts of the intestines as if they had been contracted. There was no constipation in any part of the whole tract of the intestines,

nor were they scarcely in any place distended with flatus. In some parts of the canal there was slight inflammation of the lining membrane, especially where it was invaginated. The large intestines were natural — bladder highly distended — liver of an enormous size, though perhaps natural. The abdomen, prior to opening it, was not the least swelled; indeed, its sides were collapsed.

It appears to me that it had been nothing more than *spasm of the intestines* from some unknown cause.

DIARRHŒA AMONG CATTLE.

By W. Cox, M.R.C.V.S., Ashbourn.

DIARRHŒA has assumed an epizootic character among the cattle of this district during the last few months. It first came under my notice in the early part of February last: since then there have been large numbers of cattle attacked all round here before going out to grass and since. If an average were taken, it is my opinion that upwards of one-fourth of the cattle of this district would be found to have been affected within the last five months; and every day now brings fresh cases.

SYMPTOMS.—Dulness, loss of appetite, cessation of cudding, milk, &c.; cold extremities, ears, horns, &c.; shivering paroxysm; staring coat. At first the fæces are very pultaceous; but they soon become slimy from mucus being mixed with them.

TREATMENT.—In the majority of cases antacids combined with carminatives have soon effected a cure. In a few instances I have administered oleaginous purges with anodyne medicine; and in a few others I have found it necessary to give active astringents. Good hay should be allowed the cattle to eat, and their beverage must be wheaten flour gruel, or they must be horned with it. Out of great numbers of cases I have had but one death.

It was my intention, when I began to write, to have sent you a description of a disease which destroyed so many cattle a few years ago in the north of Staffordshire, resembling the murrain of old; and likewise a case of scarlatina, terminating in purpura hæmorrhagica and death of a mare: but my time is gone.

Your's most respectfully.

June 15.

* * * We hope to hear soon again from Mr. Cox.

CASE OF TUMOUR.

By JOHN SCOTT, *M.R.C.V.S., Kildare.*

A YEARLING filly, by Retriever, dam by Birdcatcher, dark chestnut, without a speck of white, a complete picture of blood and shape, but small, has an ovoid or rather pyriform (small and upward) enlargement on the outside, at the ankle, on the metatarsal bone of the near hind leg. It feels hot. It made its appearance about a fortnight back, and was then scarcely perceptible. I first used cold water. The tumour increased. People wanted me to fire or blister; but, finding the tumour warm and inflamed, I commenced warm fomentations, and continued them. The tumour has, I think, attained its fullest size, which, however, is not very large. It is quite close to and appears extending upon the condyle of the bone, and so involving the synovial membrane. However, I rather think the joint is safe, and that the whole affair is but symptomatic of a change from the epiphytic state. I purpose changing again to cold upon the decline of the inflammation; but are my views right? There is no limping in the stable. I have not seen her out. She has had physic occasionally. In other respects she is well, and in beautiful condition and prime spirits. I shall gladly and thankfully receive any thing you say in reply on the case. The owner is my brother-in-law, who bred him from Chace. When he was a yearling, I consulted you about tears running over his face, and your predictions became fully verified. The lachrymal ducts became clear, and his eyes remain good, although his dam is stone blind; and it is worthy of remark she never bred a blind one. There is a yearling colt of hers now by Tearaway, of an immense size, and powerfully made; also a foal this year by your favourite Hearnaway. It is a filly, and the ninth foal, all with good eyes.

I remain, my dear Sir,
Your obliged humble servant.

CASES OF DEATH FROM DRENCHING.

By Mr. ARKCOLL, *Leek.*

I SEND you the following cases, trusting they may prove a lesson to some of the younger members of the profession, and shew them the necessity of lowering either horses' or cows' heads, should they cough while administering medicine in a liquid state.

The first was a two-year-old colt taken poorly with sore throat, cough, running at the nose, and all the symptoms of influenza. I attended him for a time, administering suitable medicine, causing his nose to be steamed, his throat well rubbed with stimulating liniment; and he began to recover, when the owner turned him out. The cough and the sore throat soon returned. He came to me for liniment for his throat, and then went to a chemist, as he afterwards said, for some nourishing powders for him. He sent to me in a great hurry, about nine P.M., to come and see the colt. They had been administering the powders, and directly after giving them he broke out in a cold sweat, with shivering, pawing the litter, lying down, and all the symptoms of violent pain. I directly imagined the cause, and upon making inquiry of the messenger (who held the colt's head while the owner administered the medicine) found, while taking the first hornful, he began to cough, but they would not let his head down for fear of losing the medicine. On arriving at the place, a mile from my house, I found my patient in a pitiable state; covered with cold sweat, continually up and down, with respiration much quickened, pulse about 110, and extremities cold. I told the owner it was a hopeless case. He, however, felt desirous I should give him some medicine, and I administered opium, digitalis, nitrate of potass, and aloes; and after a deal of trouble managed to abstract about a quart of blood, black and thick. He died at four A.M.

Business intervening, I was unable to make a post-mortem; but, on making inquiry, having directed them to examine the trachea, I was told the whole of its lining was found very much inflamed, filled with froth mixed with particles of the medicine; the lungs gorged and black.

The second case was a valuable cow belonging to Mr. Smith, near Enda. She was taken poorly, and assistance was sought of a smith living near, who sent a drink, which they gave out of a *tea-pot*, having neither horn nor bottle in the place. After taking the medicine she became rapidly worse—refused meat—commenced coughing—breathed very quick. Her master then sent in a hurry for me, expecting he had got a case of pleuro-pneumonia. On arriving, I found her with nose extended, breathing very quick, and a nasty cough—pulse about 90. I rather imagined it was pleuro-pneumonia myself. Still, there was not that sound at the lungs we would expect from the urgency of the other symptoms. I bled to the extent of two quarts, when she dropped. I then administered sulph. magnes. \mathfrak{z} xiiij combined with zingib. dig. & nit. potass., leaving her till the next morning, when, upon visiting, I found her rather better, and the medicine operating. Then, for the first time, they told me of administering the medicine, and out of what

it had been given. I directly imagined that was the cause of her getting so much worse, and, on inquiry, found she coughed while taking it; but they would not let her head down for fear of losing the physic. I then set the owner's mind at rest as to pleuro-pneumonia. I administered some more medicine, and applied a blister the extent of the trachea, when she gradually recovered.

If you think the above cases worthy of insertion in your Journal, they are at your service, and believe me,

Your's truly.

June 10th, 1848.

PROTRUSION OF THE RECTUM IN PIGS.

By JOHN NELSON, V.S., Highfield, Sheffield.

SEEING that no writer hitherto has given the proper treatment for protrusion of the rectum in pigs, and knowing, as I do, the frequent occurrence of the disease, particularly in towns, where their food is much different from what it is in the country, many pigs must be lost to the owners from this disease. And since they are generally in a lean state, and worth little or nothing for slaughter, it is of importance to know that, under proper treatment, they can be mostly restored to health.

THE CAUSES in general are, unwholesome food given too abruptly, and injuries. I have known many pigs purchased in the market, and carried home by the middle of the body under the owner's arms, to have the rectum protruded the next day. Over-driving, farrowing, &c.; any injury that relaxes the parts, such as blows on the abdomen or loins, the giving of strong broths made from bones, or the intestines, &c. of other animals, such as come from the slaughter-houses, &c. without being mixed with a proper portion of other food, and gradually introduced. Young pigs are much sooner diseased by the above food than old ones. I know a butcher who purchased four pigs from three to four months old, and commenced feeding them with the refuse of the slaughter-house too suddenly, and they had the whole of their recta protruded in three days. Indeed, any kind of strong gelatinous food, given too abruptly, produces the disease more than any other cause. I have seldom seen obstructions of the bowels produce it. And yet it is rare that I have not a patient of the kind on my sick list.

TREATMENT.—Suppose a pig to be found in the morning with protrusion of the rectum, the first inquiry should be, if the pig ate

a full supper the night before. If the answer should be, it *had*, let all food be taken out of its reach (if in frosty weather) for from six to twelve hours, except about a gill of milk to a pig four months old, and in proportion to age upwards, it being of the greatest importance to have the bowels empty before the rectum be returned; but if the weather is temperate, the pig may have a gill of milk every eight hours, and the rectum put up at the end of twenty-four hours, to allow the bowels to get thoroughly empty. There must be no other pigs with the patient (it had better be put up a second time than be out too long in the frost), or much injury may be done by them biting the rectum.

MY METHOD OF OPERATING is as follows:—If a small pig, which can be managed without roping, I direct an assistant to take hold of both hind legs, above the hocks. I then get astride of its back, while an assistant takes hold of its ears. The hind parts of the pig are now raised up, and it stands on its fore feet, the hind legs being supported by the first assistant. I then take a soft piece of cotton or linen, and cover the rectum over. I next take it between my two fingers and thumb, of each hand, the cloth being interposed between the rectum and them. I then press it backwards and forwards gently for some time, to reduce it in size, before I attempt to return it. Having sufficiently softened it by manipulation, I then gently return it by even pressure, or occasionally by a finger or thumb being applied to one side of the rectum, under the cloth. It being returned within the anus, I introduce one or two fingers, according to the size of the pig, as far into the rectum as possible, to thoroughly right the bowel. This being done, I take a strong needle, threaded with four threads doubled into eight, and pierce the anus on each side, taking hold at least of a quarter of an inch, and drawing the thread across in the centre of the anus. But before tying the thread, I again introduce my finger into the bowel, to replace it, should the pig in its struggles have misplaced it. I then tie the thread, but not too tight, into three or four knots, pulling tight the last. I then cut off the ends of the thread, and let the pig at liberty. Lastly, I order half-a-pint of milk, as food, every six hours, for four or eight days, as the case may be; but if solid food is given before the latter period, it will be likely to cause the disease to return. If a large pig, it must be roped by the nose, and tied to a post, and the same plan adopted, except raising the hind parts.

To Mr. Percivall.

Your's respectfully.

REGISTRATION.

By ARTHUR CHERRY, *M.R.C.V.S., Hon. Sec. to the Committee, London.*

To the Editor of "The Veterinarian."

Sir,—IN the last number of THE VETERINARIAN you have, in a Leader, made some comments on the Registration List of the Royal College of Veterinary Surgeons, just issued: you point out an error of which I was not previously aware, though it is, as you surmise, a clerical one. The list in manuscript was counted, and the numbers were entered as 819: two names were struck out in correcting for the printer; one for being twice entered, the other in consequence of the vacancy in the 12th Lancers not being gazetted as being filled up, though I was perfectly aware of the name of the gentleman appointed; but as his name did not appear in the Army List for the month of April, I was obliged to strike it out, though reluctantly. The press of matter prevented my again counting over the names after the list was in print, or I should have detected the error; therefore the number as given in your Journal is correct, viz. 717.

But you have yourself made an error in regard to Mr. Mayer's list. It was issued by the Committee of Veterinary Surgeons previous to the obtaining of the Charter, and extensively circulated per post; and though this list was far more correct than the College list, yet there were only 116 actual vouchers for the names therein. I have Mr. Mayer's list of those who replied to his circulars, and, finding that so few replies were sent in, that gentleman had recourse to the last list issued by the College, and took the entries therein as they stood, merely making such alterations as came within his own knowledge, and also adding the names of those who had received certificates from the Scotch School.

Mr. Mayer bestowed a vast deal of labour in the preparation of his list, and the highest credit ought duly to have been awarded to him, for without the existence of the labours of that gentleman I should not have been enabled to have approached to any approximation in the result of my labours in this department.

In the new list the numbers, for which there is a voucher for

each entry, is	.	.	.	.	.	.	.	.	717
In Mr. Mayer's list, ditto	.	.	.	.	.	.	.	.	116
In the Veterinary College list	.	.	.	.	.	.	.	.	0

If the list professed to be kept by the Veterinary College of those to whom were granted certificates was even an approximation to the truth, then the labour of testing it would not be requi-

site; but since such list is not only imperfect but even erroneous in its entries, it became imperative to devise a method whereby some test might exist as to those who were entitled to be members of the chartered body, the Charter constituting all those who had received certificates from either of the recognised schools members of the chartered body, to be a *nucleus*, as it were, for the carrying out and perfecting a more complete organization of the veterinary profession, and improvement in its principles and practice: for this purpose certain powers and privileges are ordained, and the manner in which the affairs of the body corporate are to be conducted are laid down.

By a custom which has become a law, any unqualified party or parties who may vote or otherwise act in the proceedings directed under a charter, such as the one granted unto us, renders the acts of such meeting at which such unqualified person may vote or act null and of no effect. Hence it becomes of paramount importance to ascertain who are *bonâ fide* entitled to vote or act at any such meeting; and though it is possible that there may exist those who are so lost to all honesty as to make a false return, yet let us hope, for the honour of human nature, that these will be of so rare an occurrence as not to militate against any open plan that may be proposed. There is many a man who would allow an inuendo or false statement to pass current to serve his own turn, but who would shrink from stating the same in black and white; and no man is so ignorant but he knows the nature of and penalty for *perjury*, which a written statement would at once prove beyond denial.

Every member of the profession alike benefits by the royal grant; and any who refuse to obey the powers granted thereby are guilty of insubordination to the laws under which they live and are protected, and also of personal insult to those who are appointed to act under the provisions of that grant. Let them reflect for a moment, and ask themselves, Whether it is doing as they would be done unto? Can they suppose for a minute that all this trouble has been taken for any individual benefit or personal pleasure? I issued 750 circulars: to fold, seal, and direct these alone occupied upwards of *three days* of ordinary business duration. I say nothing of the ulterior labour of collecting, copying, arranging, and preparing the various matter for the formation of the list. Of these only 430 have been returned, and 22 from the dead-letter office. Now, what has become of the remaining 300? If the parties to whom they were addressed had not been in existence, or not resident as addressed, the major part, if not all, would have found their way back, as the 22 from the dead-letter office have done. It may be possible that some thus addressed were not entitled to make returns, though their names were entered in the Veterinary College

list as certificated members, and, in accordance with a previous remark, have shrunk from an act of dishonesty; but this can apply but to few, and, possibly, not to any. But, no; the feeling is apathy, or, what is worse, a mistaken position. "Let them dare to refuse to insert my name in their list," has been uttered more than once or twice to my own knowledge; or, again, some have such egotistical notions of their own grandeur and importance, that they hold themselves above all law, rule, or custom; forgetting that the first law of the gentleman and of the British citizen is courtesy and obedience to the requirements of the customs and laws of the land. Since, however, we so find it, we can only look with pity on the first, silence on the second, and contempt on the third.

Once more I will take the trouble to address the parties who have omitted to make their returns; but I shall not do so a third time. I will neither sacrifice my own time, nor consent that the funds of the body corporate shall be frittered away on such objects. I will go through the labour of preparing another list; but I unhesitatingly state, that I will not proceed any further: it is too great a tax on any one; and when one only meets with dissatisfaction, contumely, or insult, it does not at all tend to lighten the burden.

According to the best estimate I have been enabled to make, there are still about 500 members to register; that is, 300 who have been already applied to and have neglected to make their returns, and 200 whose addresses are unknown.

I feel honoured by the high terms in which you have been pleased to notice my labours: personally, I feel that I do not deserve such encomiums, as I hold that no man deserves thanks for doing his duty; but certainly no man deserves blame when he has done his best.

I am, Sir,

Your's obediently.

ACCOUNT OF AN INTESTINAL TUMOUR SENT FOR EXAMINATION.

By WILLIAM GOODWIN, M.R.C.S., Veterinary Surgeon to the Queen.

AN aged carriage horse, belonging to her Majesty, was lately taken suddenly ill at Windsor, and died in the course of a few hours. He had been eighteen years in the royal service, and during the time had ever and anon experienced fits of "gripes," and had on every occasion been relieved, up to the last and fatal attack, by the exhibition of the ordinary antispasmodic remedies.

POST-MORTEM EXAMINATION discovered a tumour, about the

magnitude and shape of a common round garden melon, weighing 4½. 2oz., attached closely to the concave or mesenteric side of the jejunum, at a distance of fifteen or sixteen feet from the stomach. It was included between the peritoneal layers of the mesentery, which had formed a complete case for it, and was continuous both superiorly and inferiorly with the peritoneal coat of the intestine. Opposite the part, however, against which it was lying, and for some extent above and below it, there was a remarkable attenuation of the tunics of the gut, as though its muscular substance had disappeared through absorption. Yet the passage of the canal did not appear to have been affected by the tumour, neither was there any discolouration, as indicative of inflammation or disease, in any part. In one place the dysentery was found, to the extent of six or eight inches, torn from its attachment to the spine; the effect, seemingly, of the draggings or jerking of the tumour upon it during the struggles of the horse in his paroxysms of pain. This laceration had occasioned a twist of the gut, which had completely stopped the passage through it; the oil of turpentine that had been given being perfectly detectible by the smell above the twist, though undiscoverable below it. The tumour, on being cut into, exhibited a marbly granular sort of aspect, the composing substance of which was soft and of a pale ashy colour; and yet, when pressed or squeezed, proving tough and leathery from, as it would appear, numerous intersecting slender bands, densely cellular, and perhaps ligamentous in their composition. In fine, it was a species of the class "fibrous tumours;" and had, to all appearance, been some considerable time in coming to its present growth and composition.

Extracts from Foreign Journals.

The Inoculation of Flocks of Sheep for Small-Pox, viewed as a Measure of Sanitary Police.

By O. DELAFOND.

[From the "Recueil de Médecine Vétérinaire" for Nov. and Dec. 1847.]

AN inquiry such as this, conducted by such a man as M. Delafond, to say the least of it, is interesting to us, even though the sheep small-pox is but at present a visitor to our flocks. Let us hope it may never become indigenous among them. Meanwhile, for fear it ever should turn out to be a stock disease, there

can be no great harm in furnishing our minds with such practical knowledge as is to be found in the present inquiry—one which comprises four objects:—

1st. Whether small-pox is frequent or rare in France—its contagion—its ravages, &c.

2d. Inoculation with sheep-pox, as a sanitary measure calculated to restrict or arrest the progress of contagion.

3d. Objections raised against the practice of inoculation as a measure of sanitary police.

4th. Regulations imposed on the sanitary police of animals, &c.

In reference to the first inquiry, it may be stated, that,

1. Sheep are afflicted with an eruptive contagious disease analogous to the small-pox or *variola* of man, which has received the name of *variola*, sheep-pox, &c.

2. In certain parts of France, where sheep are bred and reared, such as Sologne, Berri, Gatinais, and Champagne, and all the south of France, sheep-pox returns in a manner every year. In the localities bordering on large towns or great centres of traffic, such as Paris, Lyons, Bordeaux, Toulouse, &c., sheep-pox is still very prevalent, and is more general in situations in which farmers are engaged in fattening sheep. Compelled to buy and sell no less than three or four flocks every year, they cannot avoid purchasing lots of sheep either coming out of infected flocks, or that themselves have been exposed to contagion. In 1801 the flocks of the Hautes-Pyrénées, in 1802 those of Crease, in 1803 those of Rhone, in 1805 those of Seine and Marne, and in 1808 those of Aube and Gers, were decimated by the sheep-pox, &c. &c. &c.

Lastly, in 1846 it raged among many flocks of sheep in the department of the Somme. Notwithstanding all this, however, it is very rare nowadays for sheep-pox to assume an epizootic form and ravage numerous large flocks as formerly, thanks to the benign influence of inoculation.

3. Nowadays, nobody questions the contagion of sheep-pox. Inoculation is a positive proof of it. Nor are we less convinced that emanations or morbid vapours, exhaled through cutaneous or pulmonary transpiration, or that mucous discharges from the nasal and intestinal canals, mingling with the atmosphere, may not equally as well transmit the contagion. Now, these contagious emanations become mingled with air, which, especially when the atmosphere is dry and warm, is found to communicate sheep-pox to flocks in good health feeding in the same places, following in the same tracks, and frequenting the same watering places as the diseased flocks. Impregnating the shepherd's clothes, the dog's hair, the sheep's fleeces, these emanations render both man and animals in good health themselves propagators, mediately, of

sheep-pox. The virus of this disease is, therefore, subtle and fearful, since not only animate but even inanimate objects that have come in contact with animals who have sojourned in the contagious atmosphere may become agents of transmission.

4. Observation has positively ascertained that the sheep-pox pustule contains within its inclosures, from the second or third day of its appearance to the eighteenth or even twentieth of its duration, a virulent fluid, capable of transmitting the disease. The contagion of the disease, therefore, must last for fifteen or sixteen days, at least, out of the twenty-five or thirty that it takes to run through all its stages.

5. Although the constitution, age, breed, and condition of the animals affected with the pox, as well as the season and salubrity or insalubrity of the folds, exercise considerable influence over the character, malignant or benignant, of the pox, observation appears to have demonstrated that contagious virus derived from a malignant natural pox produces a benignant pox, and *vice versâ*. Whatever, however, may be the malignity or benignity of the disease with which their sheep are threatened, farmers have reason ever to be alarmed at its appearance among their flocks.

6. Observation has taught us, that idiopathic small-pox, or that which is communicated naturally through some volatile virus, does not attack at once the whole flock, but shews itself by three and sometimes four successive attacks known by the name of *bouffées* or *lunées*, and that the duration of each of them is from twenty-five to thirty days; hence the total duration of the natural sheep-pox in a flock is at least from three or four months. So that, supposing during the time that the disease should be transmitted through contagion, it follows of necessity that the sanitary measures prescribed by the acts and regulations of parliament, such as sequestration in the pens or distribution in the folds, ought to be maintained for at least three months.

7. The mortality occasioned by the pox in flocks is very variable. In localities wherein the disease is in a measure annual, and where the breed is indigenous and local, the losses are inconsiderable, and great mortalities exceptional; while in all places wherein are bred, reared, and sometimes fattened, sheep of an exotic breed, pure or crossed, sheep-pox, *cæteris paribus*, is productive of great losses.

Excessive heat, as well as excessive cold, salubrity or insalubrity of situation, fat or lean condition, tender age, pregnant state of the females, are all so many circumstances tending to augment the mortality; while the opposite conditions diminish it.

With a view of arriving at a mean estimate of mortality in the case of sporadic sheep-pox, enzootic and epizootic, I have made

extracts of estimates published on this head by French veterinarians. From these it appears, that natural enzootic sheep-pox, prevailing at different seasons in the year among three, four, or five flocks in the same locality (*commune*), and those flocks being either of indigenous or exotic breed, habiting the north or the south, the east or the west of France, a fertile or barren part of the country,—I say, from these calculations the result is, that the scale of ascertained mortality from sheep-pox runs about twenty per cent., in the more fortunate instances it being but fifteen per cent., while in the most unfortunate it rises to thirty and even forty per cent.

In Berri, where natural sheep-pox is in a manner enzootic and annual, according to the statistic accounts of M. Guillaume, veterinarian at Issoadan, the mortality does not exceed ten per cent.; and I know positively that this mortality is about that of Sologne. Nevertheless, along the valley of the Loire the mortality rises, reaching from twelve to fourteen per cent.; and here cultivation is at its highest, and the breed rather less native.

In Prussia, according to an estimate made on the occasion of the prevalence of a natural pox in 1823, about the environs of Frankfurt, among different flocks forming altogether in number amounting to 51,981 head, the mortality did not exceed seven per cent.; and this is the lowest average I have met with in all my investigations

We ought, however, to add to these estimates such infirmities as have supervened upon recoveries, such as the loss of one or both eyes, lamenesses, chronic diseases of the lungs and intestinal tube, which amount at least to three or four per cent.

8. When sheep-pox appears as an epizootic, the losses are very variable: generally, they amount to the fifth of a flock; rarely to less. At other times—and, unfortunately, such instances are not so very rare—the mortality reaches a quarter, a third, and even the half of a flock. So, on a calculation of 21,825 animals attacked with epizootic sheep-pox in the north, the south, the east, and the west of France, 5087 sheep have died, making the mortality twenty-seven per cent., or more than a quarter. In the epizootic pox, which very often is confluent, the number of infirm, of blind, &c., becomes likewise increased, and probably may be estimated, on an average, at five or six per cent. at least.

9. The death of sheep of greater or less value, set apart for the improvement of the breed;—of sheep fat and fit for the butcher;—the supervention of blindness;—the difficulties thrown in the way of rearing lambs;—the death of lambs, and the casualties resulting from it to the dams, already in ill health from sudden suppression of their milk;—the expenses of measures of sanitary police;

—all these losses are enough for the farmer to bear : but his troubles do not end here. Natural sheep-pox is attended with an eruption of pustules over the different parts of the body, occasioning shedding of the fleece in places, and altering the quality of the wool ; and this loss, when the wool is fine and valuable, is by no means inconsiderable.

So that sheep-pox is ever to be regarded, be its nature what it may, as a malady which commonly proves destructive at the rate of a fifth of the flock, and which, in cases wherein the sheep do not succumb from it, engenders infirmities at the rate of four or five per cent., and which, moreover, more or less reduces the value of the fleeces.

Another question awaits my examination, and it is a very important one, being no less than the propagation of sheep-pox, and its duration in a single flock or in several flocks, as calling for the imperative exercise of sanitary measures, at all times very inconvenient, and sometimes very annoying to farmers.

10. Whenever sheep-pox breaks out in one or several flocks, the sanitary measures it behoves the authorities to see put in execution, in accordance with the laws in force at the present day, are, inspection, sequestration to the pens, folding in the field, the slaughtering of such sheep as are deemed incurable, the interment of the carcasses ; lastly, the prohibition of vending or exposing for sale sheep either in a state of disease or contagion.

All these measures, sequestration to the pens, folding, prohibition of sale, become additional inconveniences and annoyances to the proprietors.

11. In winter, to be sure, sequestration to the pens is a measure attended neither with trouble nor expense. Providing the farm wherein the disease prevails is isolated, the flock can go out about the neighbourhood and visit their watering-places ; but in case the farm should border on other estates to which the flock, by going out, might convey the contagion, a measure like this becomes inconvenient. The sheep must be watered in their pens. They cannot be permitted to go abroad ; and constant residence in their habitations, often insalubrious by accumulations of dung, for at least three or four months, may occasion abortions, ulceration of the umbilicus in the lambs, and sometimes the mange or the rot in the flock. During the continuance of the fine weather season, and when the situation and condition of the pastures is such as not to admit of folding, sequestration in pens, at a time that the sheep ought to be getting their living in the fields, becomes a source of expense, a cause of their losing their fat, and a failure in crop to the farmer.

In localities in which the flocks have a vast range of herbage for the most part uncultivated, in large arable farms where fallow constitutes part of the alternations of cultivation, folding is easily managed, and maintained for sufficient time to prevent contagion; but in countries richly and extensively cultivated, where fallow has in a manner disappeared, and in parts of the country where property is divided, as it is in the plains whereupon the wind, during the warm and dry season, may carry the contagion a distance, folding is not always practicable; nor can it be done always without risk of spreading the disease. I might also add, that it might become an affair of expense to the farmer, to be obliged to carry all the food and water required to the pens.

Nor is this all. In the case of the natural sheep-pox, the duration of sequestration and folding should necessarily bear some relation to the continuance of the disease among the flock. Now, I have said that this malady exhibits three attacks, or *bouffées*, and that each of these attacks lasts nearly a month; so that sequestration or folding must be persevered in for three or four months at least.

Add to this, that during these three or four months of imperative isolation the farmer will not be permitted to dispose of his sick or suspected sheep, we shall feel persuaded, as I have said before, that the sanitary measures in force at the present day are in most cases inconvenient and onerous for graziers.

In the case, however, in which such measures can be and are put into practice, still another question presents itself, and that is, whether they really are beneficial and tend to prevent propagation of the contagion of sheep-pox.

So long as the pox is confined to one flock, or in case even it should prevail among several flocks in the same commune or locality, isolation, whether it be in the pens or the fields, is, generally, the only measure that can prevent the spreading of the malady. But when an epizootic and fatal pox is spread over a large surface of country during a warm and dry season, and at a time that the flocks are out grazing, and especially where natural obstacles, such as woods, hills, mountains, marshes, and broad streams of water, become no boundaries to the infected localities, folding and sequestration being difficult of execution, incessant and often impossible surveillance, are the only measures, and they sometimes fail in arresting the progress of contagion. The persistence of the sheep-pox in 1812 in the department of the Somme, together with its introduction into the Pas-de-Calais, and its propagation in fifty-nine parishes (*communes*), the appearance of the malady in seventy-four parishes of the Marne, and its duration for nine years in this

district; its extension and continuance for two years, from 1820 to 1822, in the department of Aube and Herault, are, among other proofs which I could cite here, demonstrative examples that the sanitary measures prescribed according to the acts of parliament and regulations in force at the present day, particularly those of sequestration and folding, insufficient, in a great number of instances, to arrest or confine the propagation of epizootic sheep-pox.

12. To sum up, it follows from the facts above detailed,

1st. That sheep-pox is a disease which has prevailed, and still annually breaks out in France, among the flocks of sheep in most of the departments.

2dly. That nobody, now-a-days, questions the contagion of the disease, either through the virus secreted within the pustules, or through the volatile emanations emitted in the form of vapour from the skin and the lungs, and united with the surrounding atmosphere.

3dly. That it is possible for such contagious emanations to be carried by currents of air, especially warm and dry, to a distance estimated at from two to three hundred yards and upwards, and so to communicate the disease to flocks in good health.

4thly. That animate or inanimate bodies, impregnated with this contagious miasm, may prove equally conductors of the disease to a greater or less distance.

5thly. That on any one diseased animal the contagion may prove operative for at least fifteen or sixteen days, and for three or four months in the case of a flock: circumstances which imperatively call for, during such lapse of time, the employment of sanitary measures, such as folding, confinement in pens, &c. &c.

6thly. That upon certain circumstances connected with locality, season, age, breed, condition, in unison with other circumstances hitherto inexplicable, depends the fatality of sheep-pox, insomuch that, supposing even the pox prove benignant, it ever behoves farmers to dread the invasion of their flocks by such a disease.

7thly. That in France the average mortality occasioned by natural sheep-pox, isolated, enzootic, and annual, prevailing in different localities and under different circumstances favourable and unfavourable to the conservation of the sick animals, is, at the very least, 10 per cent.; at the very most from 20 to 40 per cent.; the mean averaging 20 per cent.

8thly. That to these per centages must be added the infirmities, such as loss of sight, lamenesses, consecutive ailments, the whole running from 3 to 4 per cent.

9thly. That, in the case of epizootic pox, the mortality, estimated at a high rate, rises on an average to 27 per cent., and the consecutive accidents to 5 or 6 per cent.

10^{thly}. That, in the case of isolated enzootic and epizootic sheep-pox, the fleeces of animals of the ovine species undergo more or less alteration, and, as a consequence, become diminished in value.

11^{thly}, and lastly, That the sanitary measures prescribed by law, and the sanitary regulations, independently of being found troublesome and onerous by farmers, prove, in many instances, insufficient to arrest the progress and limit the ravages of sheep-pox in the epizootic form.

ON THE CASTRATION OF MILCH COWS.

[From the *Recueil de Médecine Vétérinaire* for January 1848.]

IN spite of the numerous experiments instituted for the purpose of shewing the advantages of castrating milch cows, it is an operation still but little practised in France. Nor are we to be surprised at it. In a matter like this, to convince people, it is not opinions, but examples, the results of many years of experience, that are wanting, to demonstrate the innocuousness and advantages of this new method of rendering the bovine female subservient to the production of milk, and of meat for the butcher.

It is to be regretted that, for the twenty years this secret has been brought to light, the application and practical worth of it should have been left to isolated experimentalists to determine. The results of their labours, notwithstanding the ability and good faith they bear the character of, can never have the same weight with the public as experiments followed up with regularity and perseverance by the orders and under the direction of that superior administration (of Government) who alone possess credit for denial and disinterestedness.

It is the duty of the administration to make trial in France of the *naturalization* of that *neutral* variety of domestic females, sterile for breeding, but, according to what experimentalists say, fecund and so valuable for the production of milk, and which according to our honourable colleague, M. Levrat, of Lausanne, who, of all others, has thrown most light on the subject, will besides enjoy, by virtue of the operation, a sort of immunity against the attacks of contagious pneumonia, the cause, at the present day, of so much desolation and ruin among the dairy-keepers.

If these results were true, the benefits their demonstration would diffuse would abundantly repay any sacrifices the state might make to obtain it. In the contrary case, the question would

be definitively settled, and either way certainly is vastly better than indecision.

We wish the administration would cause to be instituted in the veterinary schools a series of experiments on a matter so interesting for the economy of the cattle of large towns. To conduct such to a satisfactory conclusion would not require any very great outlay. This we shall be able to prove in another article, shewing the results of some experiments that we ourselves made at college two years ago, with the assistance of some cow-keepers in the neighbourhood.

Waiting for the realization of our wish, we are desirous to communicate to the public the recent efforts made by one of our brethren, M. Charlier (of Rheims), with a view of throwing additional light on so important a question of physiology and rural economy. Most sincerely do we trust that so honourable an undertaking may not prove too much for his powers.

Here is the *Compte-rendu* of his first essays:—

REPORT OF THE ACADEMY OF RHEIMS ON THE CASTRATION OF THE COW.

By M. P. CHARLIER, V.S.

Corresponding Member of the Academy and Central Society of Veterinary Medicine.

N'allez pas, trop superstitieux,
Servir servilement les pas de vos aïeux,
Créant à l'art des champs de nouvelles ressources,
Preez d'autres chemins, ouvrez-vous d'autres sources.

DELILLE.

Gentlemen,—UNTIL very lately, although we were acquainted with the principal modifications produced on the organism by castration, we were not acquainted with the influence thereby exerted on the lactary secretion. It was not until the commencement of the present century that an American agricultural writer, Thomas Winn, conceived the happy idea of castrating cows, with the view of prolonging the period of lactation, without the necessity of renewing gestation.

After Mr. Winn, who had refused to give publicity to his discovery either from the apprehension that it was not new, or that the doubts which were still impending over its utility might expose him to ridicule in the eyes of those who were ignorant of it, M. Levrat, veterinary surgeon at Lausanne, in Switzerland, and M. Regine, veterinary surgeon at Bordeaux, made fresh trials of the operation with the same end in view, and, through some papers

inserted in the *Recueil de Médecine Vétérinaire*, made us acquainted with the results.

From this time no more was heard, that we know of, save that M. Merin, veterinary surgeon to the Royal Dépôt of Stallions at Laugonnet, who had been engaged on the subject, published an interesting notice on the operation, under the patronage of M. Ephrem Houël, director of the stud.

The Alfort School, in one of its *Compte-rendus*, certainly announces that some experiments have been made on the castration of the cow, but adds no detail. Some veterinary authors have also made mention of the fact in their works as matter of history; and their opinion, generally speaking, is in favour of the operation.

It would appear that this operation, although long ago performed in Germany and England, and some other European countries, with the intention of increasing the disposition of cows and heifers to grow fat, has been scarcely practised with the view of prolonging the period of lactation, and as yet has excited but little attention in France. Therefore a great deal remains to be done to complete the trial of it, and furnish us with something like conclusory information.

This task I have undertaken. May my efforts be crowned with success, and serve to demonstrate the practical utility of such an operation in large towns and their suburbs, and even in the country, in all suitable cases!

Experiment I, April 1845.—The first subject operated on by me—of which our honourable president, M. Doctor Lindouzy, who was present, has given an account—was the property of my father, who felt desirous to lend me assistance in my first trials, by giving me up one of his own cows. She was about eighteen years old, gave but little milk, and was in poor condition.

The operation succeeded beyond my expectations. No great deal of suffering was felt, and a few days afterwards she gave her usual quantity of milk; and this continued for the space of fifteen months, at the expiration of which the cow was sold to the butcher, in satisfactory condition, considering that after the operation she had nothing more to eat beyond what was allowed her before. The butcher expressed his surprise at the quantity and quality of the fat found on opening her. One circumstance it is essential to mention, and that is, that the milk became of better quality: persons who had used it at the house found it more palatable after the operation.

Experiment II.—In the month of July following I was called by M. Bossiaux, of Cernay-les-Rheims, to attend a cow labouring under, in the highest degree, *prolapsus vaginæ*; an affection which proves so hurtful to the lacteal secretion, to fattening, and even

tends to threaten the life of the animal. In their turns, all means commonly effectual in like cases were employed, but never with complete success. I took advantage of the occasion to beg of the owner to give the cow up to me, seeing she would never more be of any value to him, in order that I might make her the subject of a second experiment; and I was the more desirous for this, because I wanted to ascertain what effect such an operation was likely to have on the disease she was suffering from.

The operation succeeded as well as on the first occasion. The cow subjected to the operation on the 6th, gave on the 16th her usual quantity of milk, which a little while afterwards even became augmented.

The prolapsus never appeared afterwards, and the animal fed better, and got fat.

This satisfactory improvement lasted about fifteen months. At the end of this time the cow becoming stronger and her disease threatening to re-appear, she was sold to the butcher, notwithstanding she continued yielding the same quantity of milk. As in the case of my father's cow, from the report of the dairy-maid, the milk was of superior quality.

Experiment III.—Upwards of eighteen months passed before another subject offered. All my representations proved vain. I could not prevail on another cow-keeper to give me up one of his cows; when, by chance, I happened to be talking with M. l'Abbé Charlier, director of Béth'léem, who, less wedded to old customs than fond of improvement, felt desirous of aiding me.

A cow of little value he had in his stable was set a price on by us, and we agreed among ourselves to bear the loss, providing any thing happened to her. We were, however, not put to the test of any disagreement; for the animal in the course of a few days recovered, and shortly after gave her allowance of milk, which, as in the case of the other cows, proved more creamy and pleasant to the palate. For months afterwards the quantity of milk by degrees diminished, the cow beginning to grow very fat, without any augmentation of aliment. Soon afterwards her milk dried up. M. Charlier then sold her to the butcher, in whose hands she yielded abundance of fat, and meat of an excellent quality. A farmer of Rheims, M. Damoulin, who saw the cow before the operation, felt no hesitation in affirming that the cow had doubly increased in value.

Experiments IV and V.—About the same period, M. Guillotin-Guillot, grazier at Mazilly, commune d'Hermonville, made trial of this operation on two cows at the same time. The success was as complete as in the former instance, notwithstanding one of the cows was about ten days gone with calf: she, however, languished, and

her milk did not return to its ordinary quantity for from twenty-five to thirty days afterwards.

It is worthy of remark that M. Guillotin, not having had recourse to the operation with the view of profit, but purely for experiment's sake and to please me, made no selection of his subjects. His cows, of mediocre kind, gave but little milk, and were in bad condition. Nevertheless, he had reason to congratulate himself on having made such an experiment, of which he gave proof in ever afterwards keeping none but castrated cows.

Experiments VI and VII.—Next came M. Bellencontre, an innkeeper, possessing cows at Dieu-Lumière, who, having heard some persons at Paris speak of the advantages of this operation, and knowing the faith I put in it, felt desirous to have it tried, and sent me two cows for that purpose.

From the morning of the operation both these cows fed and ruminated well, and their milk daily came more and more up to the ordinary quality. They appeared lively. In fact, every thing announced complete success; when on the 26th of the month, nine days after the operation, one suddenly became unwell, refused all food, ceased to ruminate, and gave no milk. Puerpulent fever had set in. I felt lost in conjecture as to the cause, when I was sent for to the other cow, who likewise had been taken ill, and with the same symptoms as her companion. Blood-letting, vapour baths, dry and irritating frictions, emollient and laxative drinks, enemata, &c &c.; nothing, however, could save the best cow of the two. The other, by care, was enabled to withstand the disease; her milk gradually became of the same quality. Very lean as she was, this cow grew fat, although she had no more to eat than the others. At the end of about fifteen months, M. Bellencontre sold her at a good profit. But the first cow had died, and nothing further was wanting to arrest me in my experiments. M. Bellencontre himself, discouraged by his neighbours, durst not for a long time afterwards try any fresh experiments.

Nevertheless, M. Bellencontre was convinced that the cause of the misfortune was unconnected with the experiment, and he hesitated not to declare this; and afterwards I felt assured of this myself: for the very night of the operation a storm set in, and it was just afterwards, while it still rained and blew hard, that the cows were for the first time taken out to be watered at a place where they went in knee-deep, and drank as much as they chose.

Experiment VIII.—On the 7th of May 1847, M. Haquart, cow-keeper at Rheims, notwithstanding what had happened to the cow of M. Bellencontre, with which he had been made acquainted, was desirous I should operate on one of his cows.

The beast chosen was one that was frequently vertiginous, dif-

ficult to manage, gave but little milk, and ever appeared out of condition. Nothing seemed to promise any amelioration save the operation of castration: for my own part I felt persuaded of this, and I endeavoured to instil a similar feeling into M. Haquart.

Unfortunately, perhaps for both him and me, it entered my head to make trial of a new method of operating, which, notwithstanding it had succeeded, I had remarked that it proved a long and difficult business, and particularly on cows such as this one, to extract the ovaries by torsion and tearing out, and that thereby the abdomen was in consequence too long exposed to the air.

To obviate this inconvenience in the case of M. Guillotin, I had cut them out through a simple incision with a pair of blunt scissors; neither had I any reason to apprehend any thing from this mode of operating.

Whether the scissors were too sharp, or whether the bloodvessels were deficient in retractive force, or whether the blood, from its excessive fluidity, refused to form a clot, there arose considerable hæmorrhage. Blood flowed into the abdomen; death was certain; I therefore had the beast slaughtered for the low-priced butcher.

This last result threatened to prove fatal to the success of the operation at Rheims. Nevertheless, I would not be discouraged, since there remained still two resources to me: one was to take up the operation on my own account, or to guarantee such animals as were trusted to me. I resolved to make trial of them. For the execution of the first project, however, I was not prepared; and, for the second, I obtained nought but refusals or evasive promises. M. Bellencontre was the first to accept my proposition.

Experiments IX, X, and XI.—One cow, which I took to my own home, was operated upon with complete success; two others, which were sold to me, likewise did well in succession. Afterwards, by a fatality which seemed bound to me in my inquiries, one of them, which M. Bellencontre had purchased as fresh-calved, proved with calf about three months. The consequence was considerable hæmorrhage, abortion, and, as one might expect, the supervention of metro-peritonitis, followed by death.

Experiment XII.—The very morning following this unfortunate operation, I had to repair to Villios-Franqueux, to castrate the cow of a private individual, an old gardener of M. Guillotin, who had been present at the operations performed at the latter's house, as well as acquainted with the results.

This time, I must confess, it was not without trembling that I opened the abdomen; however, since the chance was given me, I did not like to forfeit it. Had it not been for that, and that I also felt a vehement desire of perfecting an operation which I knew would turn out useful, I believe I should have——

The cow, by nature very irritable, suffered extremely at the time of the operation: no sooner, however, had she returned to her stable, than she commenced feeding, regained her spirits, in the evening ruminated, and in three days' time gave us good milk as usual.

Experiment XIII.—M. Bellencontre, animated with the same zeal as myself, gave me up a fourth cow, the finest in his cow-house. The operation was performed on the right side in preference to the left, as in the case of the preceding experiments. The right affords the double advantage of allowing the operator freedom of manipulation, and of preventing adhesion of the rumen to the side at the time of cicatrization. Nor is the rumen liable to be disturbed in this operation. The animal suffered but little, did not appear sensibly affected, and went on extremely well for several days.

All the cows last operated on have given, up to the present time, a full quantity of milk, of superior quality; and, notwithstanding the low condition they were in from the mediocre quality of their food this year, they carried flesh, and afforded in the end the same results as those hitherto arrived at.

Experiment XIV.—Since I was called by M. Cabaret, farmer, at Berry-au-Bac, to castrate for him a cow said to be bulling, who gave but little milk, and lost her condition from day to day, notwithstanding she had abundance of food.

Always bulling, she was continually tormenting the other cows, mounting first upon one, then upon the other, and even proved dangerous to persons about her.

The operation turned out one of the most fortunate, notwithstanding she had filled herself without our knowledge, and that the consequence was indigestion immediately consecutive on the operation.

At this time her milk increased, and she had become perfectly tranquil, even docile, and has begun already to make flesh.

An analogous result, following on this, is reported by Professor Magne in his *TREATISE OF VETERINARY HYGIENE*.

The dam of M. Cabaret's cow had formerly experienced similar *furores uterinæ*, which had brought her to a state bordering on *marasmus*, and she was, in the end, obliged to be sold to a low-priced butcher.

Such is a succinct *résumé* of my experiments of castrating cows and of the good effects that have followed them. These experiments, too few in number, doubtless leave much to be desired. This, however, is all we have been enabled to do. Unassisted, nay, opposed by every body, even by those who, placed as they were in a favourable position, ought to have aided us, we have been able, by great exertions, to obtain a few bad subjects, the

refuse of their kind. Three or four only were operated on in a condition at all such as was desired, and the short time that has elapsed since the operation, together with the circumstances in which they are placed at the present time, does not permit us to pronounce judgment so certain in favour of the operation.

Nevertheless, turn out as it may, we have constantly obtained from all the cows we have operated on, the cow of Mr. Charlier excepted,

1st. For the space of fifteen months at least, a quantity of milk equal to that given at the time of operation.

2dly. A milk richer in cream, more agreeable flavour, and in quantity equal to that given at the time of operation.

3dly. Marked increase of flesh, followed by fattening, without any change of food, a result by which the value of the cows has been raised from a quarter to a third, and even a half more than they were worth before the operation.

But, to our own experience let us add that of our predecessors, who were more fortunate than ourselves in the choice and number of their subjects.

We read in the JOURNAL OF USEFUL KNOWLEDGE for March 1833, that an American traveller, who had occasion to visit Mr. Hiron, a man in much esteem and consideration at Natchez, learnt that the first cow on whom the experiment had been tried recovered in a few days, and soon gave her ordinary quantity of milk, and so continued for several years, without any interruption or diminution of quantity, unless at such times as her food was scanty or altogether dry. A second cow operated on by Mr. Hiron exhibited the same success. These two cows lost their lives accidentally. Two others that had been operated on three years were in the best health and condition possible; they were giving, and had been giving constantly ever since, the same quantity of milk as before castration.

M. LEVRAT, after four years' experience, reports (in the *Recueil de Médecine Vétérinaire* for 1838) a series of experiments well founded on the effects produced by castration on the cow, as well in regard to the health of the animals as to their production of milk and fat. We will now give the conclusions drawn from this interesting passage:—

“The castration of cows appears to me to have the effect of producing a more abundant and constant secretion of milk, which at the same time acquires superior qualities, tending to these advantages to the cow-keeper; viz.

“1. Augmentation by one-third of the yield of milk.

“2. The certainty of having almost for a constancy an equal quantity of milk.

"3. Immunity from those unfortunate mishaps, the accompaniments or occasional consecutives of gestation and calving.

"4. Immunity from the accidents liable to happen in the bulling season, when heavy cows mount upon the backs of others, or such others are mounted by heavy bulls.

"5. Increased disposition to grow fat whenever their milk dries up.

"6. Lastly, castration is the only means we possess of preventing the onerous expenses occasioned by cows becoming bulling, which is so frequent in certain countries, that it is rare to see cows continuing in milk for more than two or three years without succumbing to this state. For example, in the neighbourhoods of Lausanne and Lavaux they are obliged, on account of this, to change their cows every second or third year; an obligation that is absolutely ruinous to the cow-keepers of those parts."

M. Regène (of Bordeaux), in a paper published in the *Recueil de Médecine Vétérinaire* for 1835, says, "that at the time he is writing, the good effects of the castration of cows commencing to be known in his part of the country, he is receiving solicitations from cow-keepers all around him to perform the operation."

He ends his account with saying:—

"The maintenance of the secretion of milk in the subjects of the preceding observations goes to confirm what I had already made up my mind to, viz. that castrated cows yield, after the operation, uninterruptedly, double the average quantity they gave during the foregoing years. From my investigation, from the time of my commencing my experiments until now, this calculation turns out very exact; and if cows should continue to give milk all their lives, such an operation would possess incontestible advantages, especially in large towns or localities, where provender was very dear and milk sold well."

Out of twenty-seven cows, between the ages of six and fifteen, our *confrère*, M. Morin, has experienced the following results:—

"1. Augmentation of milk in cows aged from six to eight years.

"2. Constant production in cows that have passed the above age.

"3. Milk richer than in the uncastrated cow, and consequently more buttery, and the butter of a deeper colour, at the same time that it is superior in odour and flavour to that produced by the entire cow."

To substantiate what he has said touching the invariably better quality of the milk, M. Morin relates, "that a person having had his cow operated on when fifteen years old, and recently calved, with the especial view of giving her milk to his new-born child

for nourishment, the child, by the time it was six months old, possessed a robust constitution, refused its boiled food whenever by mistake it happened to have been prepared with any other milk than that from the castrated cow."

To this M. Morin adds;—"All the cows I have castrated continue to give entire satisfaction to their owners, as well in regard to the quantity and the quality of their milk, as to that of their condition. The felicitous results every day brings of this important discovery are so conclusive and so well known at the present time in our own country, that many persons are found daily bringing to us good milch cows, or else send for us to their homes, to have the operation performed.

After what has been said, one might think nothing remained to be urged on the good effects of castrating cows: still, however, have we to combat apprehension, customs, and prejudices; to demonstrate to the farmer by reasoning, and the relation of facts of which he is in ignorance, the superiority of this new procedure; and this is no easy matter.

"Let us not forget how much it took at the time, in France, to introduce the cultivation of artificial grasses; with what tardiness, with what hesitation, were cultivated these alimentary plants, so excellent for cattle, so advantageous as an alternation of crop.

"The husbandman, timid and mistrustful by nature, is with difficulty forced out of the narrow path custom has chalked out for him, and is ever fearful, and perhaps with reason, of making miscalculations. To him nothing appears certain but what passes under his own eyes; and before he yields assent to any novelty, its advantages must be put to the proof for some length of time, under his own inspection, so as to appear to him indubitable."

In conclusion:—

The advantages derivable from such an operation by cow-keepers are,

1. That from the same number of animals they obtain more milk.
2. A steady return of milk of better quality.
3. Less loss in replacing their cows, which now they sell to the butcher, instead of sending them away in exchange.
4. Less risk in being deceived in their dealings, since the same cow will continue in milk twice or thrice as long.
5. No loss from miscarriages or down in calving, or trouble from cows bulling; or from such as remain barren for their year; or from *prolapsus*, disease of the udder, or from age, when they will not fatten.

It is also a fact confirmed by experience, that the flesh of castrated females is, in comparison to their age, superior to that of

male animals who have undergone the operation. The meat of the castrated cow is tender and juicy; more savoury than that of the ox.

The introduction of castrated cows upon grazing farms would, we feel no hesitation in averring, prove a step in the improvement of agriculture; since this operation not only affects the milk and the fattening, but tends likewise to the amelioration of breed, by rendering barren such cows as are unfit for reproduction.

The duration of the milk in the castrated cow, although at all times much longer than in the cow unoperated on, is nevertheless variable. It depends on the time when the operation is performed, on the breed of the cow, on her age, and on her condition and state at the time. In those that have long time calved, and that are aged, and either too scantily or too abundantly supplied with food, the milk dries up sooner.

To obtain the best results from the operation, cows with their third or fourth calf should be preferred, and the best time for its performance is from thirty to forty days after calving. This is the time when the milk is most abundant, and that the flesh proves of the best quality should the milk dry up.

As to the manual operation requisite to bring about this desirable state, this is not the place to speak of it: I shall do so at another time, in a work specially devoted to the subject.

Extracts from Domestic Journals.

"KUMREE," OR PARALYTIC AFFECTION IN HORSES.

By GURNEY TURNER, late Civil Surgeon, Midnapore.

[*From the First No. of "The India Register of Medical Science."*]

ALLOW me, through the medium of your Journal, to call the attention of our professional brethren, especially the veterinarians, to that paralytic or paraplegic affection (for it assumes both forms) in horses, known to us as "going in the loins," and to natives as "Kumree."

All men in India are horse owners on a larger or smaller scale, and many constantly out of the reach of scientific veterinary aid; and as this disease has hitherto been considered incurable, and is

the death sentence to hundreds of valuable horses yearly, I feel no apology due for asking information and assistance from all my "*confrères*," in a cause both scientific and humane.

Having for years used strychnia in paralytic affections of my fellow-men with great success, I was induced lately to give nux vomica in powder (having no strychnia) to a high caste Arab horse, the property of a friend, which for three weeks had lost both motion and sensation in its hind quarters and legs, and was, when I saw it, sitting like a cat on its rump. I began with but three grains thrice daily, and am convinced I lost much valuable time by so doing, and that it would be better practice to have begun with scruple doses: the medicine was gradually increased, in the course of about seven weeks, to three drachms daily, and was interrupted every fifth day, and a drastic cathartic of croton oil beans given. I also had the horse slung in its stall and "fired" on the loins and dressed the scores with the nux vomica powder: it regained sensation in its hinder quarters, recovered sufficiently to stand by itself, and, when led out, to drag and stagger through a short walk. Its general health, appetite, and condition, improved; the twitchings so peculiar to the action of strychnia and brucine were produced by the remedy, and despite a relapse, produced, I fear, by interrupting the action of the nux vomica with purgatives, I was very sanguine as to the result, when the experiment and the horse's life were alike cut short by a heroic dose, given at *no* suggestion of *mine*.

A very great objection is, I know, to be raised "in limine" to this my experiment,—that I could not be sure that over-action might not be going on in the brain and spinal cord, and, moreover, that I was very ignorant of the anatomy and diseases of the horse; and therefore I would especially beg those who are better qualified to speak on the subject than I am, to state their experience in "*Kumree*"—its nature—the course it runs—the morbid alterations attending it—the exemption of any particular race of horses from it, whether it affects mares and geldings, and in what proportion—the *supposed* connexion between it and filaria in the eye, and the power of any medicine, especially strychnia, in its treatment.

Many men in our service possess qualifications, and, by their position, peculiar advantages in carrying out inquiries and experiments in this matter, which I do not; so I prefer flinging out a hint to them to waiting till very uncertain and probably limited experience enables *me* to investigate it further.

I laugh at any one who may call my evincing interest on behalf of almost the noblest servant man has acquired, unprofessional, but fear no sneers from those who have already lost a horse by this disease; and am sorry to say few men have served any time with-

out losing one or more nags "gone in the loins," often their best Arabs, whilst it has cost the Company, to my knowledge, heavy sums, both in the cavalry and studs. I beg you, therefore, to open your columns to any statements of the experience of others which this letter may elicit.

Calcutta, January 26, 1848.

THE MOTION OF THE JUICES IN THE ANIMAL BODY.

[From Dr. Gregory's Translation of Liebig's Work.]

THAT the skin of animals, and the cutaneous transpiration, as well as the evaporation from the internal surface of the lungs, exert an important influence on the vital processes, and thereby on the state of health, has been admitted by physicians ever since medicine has existed; but no one has hitherto ascertained precisely in what way this happens.

From what has gone before, it can hardly be doubted that one of the most important functions of the skin consists in the share which it takes in the motion and distribution of the fluids of the body.

The surface of the body of a number of animals consists of a covering or skin permeable for liquids, from which, when, as in the case of the lung, it is in contact with the atmosphere, an evaporation of water, according to the hygrometric state and temperature of the air, constantly goes on.

If we now keep in mind that every part of the body has to sustain the pressure of the atmosphere, and that the gaseous fluids and liquids contained in the body oppose to this pressure a perfectly equal resistance, it is clear that, by the evaporation of the skin and lungs, and in consequence of the absorbent power of the skin for the liquid in contact with it, a difference in the pressure below the surface of the evaporating skin occurs. The external pressure increases, and in an equal degree the pressure from within towards the skin. If now the structure of the cutaneous surface does not permit a diminution of its volume, a compression (in consequence of the loss of liquid by evaporation), it is obvious that an equalization of this difference in pressure can only take place *from within outwards*; first from within, and especially from those parts which are in closest contact with the atmosphere, and which offer the least resistance to the action of the external pressure.

Hence it follows, that the fluids of the body, in consequence

of the cutaneous and pulmonary transpiration, acquire a motion towards the skin and lungs, which must be accelerated by the circulation of the blood.

By this evaporation, the laws of the mixture of dissimilar liquids, separated by a membrane, must be essentially modified. The passage of the food dissolved in the digestive canal and of the lymph into the bloodvessels, the expulsion of the nutritive fluid out of the minuter bloodvessels, the uniform distribution of these fluids in the body, the absorbent power of the membranes and skins, which, under the actual pressure, are permeable for the liquids in contact with them, are under the influence of the difference in the atmospherical pressure, which is caused by the evaporation of the fluids of the skin and lungs.

The juices and fluids of the body distribute themselves, according to the thickness of the walls of the vessels, and their permeability for these fluids, uniformly through the whole body; and the influence which a residence in dry or in moist air, at great elevations, or at the level of the sea, may exert on the health, in so far as the evaporation may thus be accelerated or retarded, requires no special explanation; while, on the other hand, the suppression of the cutaneous transpiration must be followed by a disturbance of this motion, in consequence of which the normal process is changed where this occurs.

RED-WATER IN CATTLE.

[From the "Farmer's Magazine" for June 1848].

FOR the past few weeks, red-water in cows, the second or third week after calving, has prevailed to a considerable extent in this district (Ayrshire.) This disease has been usually divided into the acute and chronic, the former of which at present prevails as an epidemic, and has been fatal in several cases. Like many other diseases, the state of the atmosphere must exercise a powerful influence, it being seldom found that one dairy is attacked without others in the neighbourhood also suffering.

The causes are obscure and difficult to discover. It is generally attributed to the nature of the food, and sometimes to the presence of acrimonious and poisonous plants, drinking bad or stagnant water, to the scanty supply of water on dry soils, low marsh lands, &c. The presence of the complaint at this time, however, shews that it is not always connected with these exciting causes, as the

animals are not yet turned out of the byre, and consequently are more likely to be free from these evils. It seems closely connected with the change which takes place in the cow after calving, and probably also a degree of indigestion; and we would therefore recommend that a dose of purgative medicine should be given to every cow immediately after calving, especially during the prevalence of this epidemic.

Acute red-water prevails mostly in spring and autumn, and in cows after calving; and as the disease is at present prevalent, farmers should be very careful to guard against the first symptoms of it.

It generally commences with diarrhœa, which is very soon afterwards followed by obstinate costiveness, at which time (but sometimes at the beginning of the complaint) the water is seen to be red. There is also a considerable degree of fever, with tenderness of the loins, coldness of the extremities, &c. In the early stage the pulse is strong and full, evidently indicating blood-letting; but when the disease has been neglected for a short time at the first, it is found weak and feeble, and the animal suffering from weakness. In all cases of high fever, when the pulse is full, quick, and hard, bleeding should be resorted to, followed up by purgatives and other antiphlogistic means. But as the disease is often considerably advanced before proper remedies can be applied, and as frequently great weakness has ensued from the passing of so much blood with the urine, the expediency of bleeding is, at least in such cases, very doubtful. Purgatives, however, combined with aromatics, must be persevered in. A good dose of Epsom salts, combined with ginger and carrui, should be given, followed by half-pound doses every eight or ten hours, until the bowels are thoroughly acted upon. This frequently does not take place till these medicines have been persevered in sometimes for three or four days: the commencement of purging is generally the sign of recovery.

On examination after death, the contents of the maniplus are sometimes hard and dry, and at other times partially so; the kidneys have a blanched appearance, and sometimes one or both shew spots of intense inflammation having existed: the uterus in cows recently calved is found very often inflamed and ulcerated.

Chronic red-water is the form which this disease more generally assumes. It is principally a disease of the digestive organs, mostly confined to the third stomach, or maniplus, and the liver also generally suffers. The urine appears mostly of a brown or *porter* colour. In many cases a simple purgative immediately removes it, and indeed a natural diarrhœa often ensues with the same salutary result.

In more violent cases, and such as are generally fatal, the diarrhœa has suddenly stopped, and given place to a severe and obstinate costiveness, which it is exceedingly difficult to overcome, requiring aromatic and purgative medicines, and more frequently repeated.

As, however, it is the acute form which at present prevails, it is unnecessary to add any thing further on the chronic.

Ayrshire Agriculturist.

GUTTA PERCHA AND CAOUTCHOUC.

[From the "Pharmaceutical Times."]

IN a former communication I pointed out to you the probability that the important articles of caoutchouc and gutta percha would be procurable from Borneo. You will now see from the annexed extract from the latest publication on the resources of Borneo, by Mr. Low, entitled "Sarawak," that the *urceola elastica* is indigenous there, and found in the greatest abundance. After speaking of the tree which yields the gutta percha, he states as follows:—

"Another substance, similar in all respects to caoutchouc, might be obtained in quantities in Borneo, as well as in many of the islands and on the peninsula. It is the produce of a climbing plant of the genus *urceola*, which grows to the size of a man's body. The bark, which is soft and thick, with a very rough appearance, on being cut emits the sap in the greatest abundance: and without destroying the tree very large quantities might be obtained from a single trunk."

Mr. Low further mentions that there are three kinds of this plant yielding caoutchouc, two of which are common to Sarawak. As a profitable article of commerce it will doubtless engage the attention of traders to Borneo; but, unless collected with care at the proper season, and unadulterated with the milky sap of other plants resembling it in appearance, disappointment will ensue, and a clammy gum will be brought to market. This would, of course, fetch a very inferior price, and may bring discredit on the genuine *urceola caoutchouc*, which, if pure, is equal, if not superior, to the produce of South America, and probably much cheaper.

I am, &c.,

A BENGAL CIVILIAN.

EXTRAORDINARY EFFECTS OF GALVANISM ON AN ANIMAL.

[From the "Leeds Times."]

A DISEASE analogous to puerperal fever is exceedingly prevalent amongst cows, of which numbers have died. A cow, the property of Mr. Moorhouse, cattle dealer, of Leeds, was attacked with the complaint two days after producing two fine calves. The poor animal lay in great agony, its moans and groaning being heard at a considerable distance : perfect paralysis (as in other cases) followed, with extreme distention of the body. On Wednesday the cow had stertor and rattling in the throat, and appeared to be dying. As an experiment, Mr. Moore, veterinary surgeon, Leeds, requested Mr. Leigh, medical galvanist, of 99, Portland-crescent, to try the effect of that agent (with his improved machine) upon the animal. A succession of shocks and the continued current was passed through the spine, abdomen, &c. The poor animal was excited on the first application in a most extraordinary manner. The galvanism was continued an hour, when the peristaltic motion of the bowels followed. A second application in the same evening produced similar results, and the following day the cow made efforts to get on its legs, and eat whatever food was given to it; the secretions returned, and on Friday, except weakness, the animal was perfectly well.

VETERINARY JURISPRUDENCE.

MADDERS *v.* MOSS.

Mr. Whateley and *Mr. Whitmore* appeared for the plaintiff; *Mr. Sergeant Talfourd* and *Mr. Wade* for the defendant.

Mr. Whitmore opened the pleadings, and *Mr. Whateley* stated the case. The plaintiff resided at Hinstock, and the defendant in a neighbouring village in Staffordshire.

Mr. Francis Hopwood, examined by *Mr. Whitmore*.—Am a farmer and horse-dealer, living at Rowley; the plaintiff is a horse-dealer at Hinstock, in this county; know the defendant *Mr. Thomas Pearson Moss*, who lives in Staffordshire: in October remembers defendant being with me about a horse, and we went to *Mr. Madders'* house to look at one; that horse had been mentioned by de-

fendant's brother; it was a grey wagon-horse; told defendant that there was a lump on the near fore pastern joint of the horse; the horse was in the field, and the defendant said it was just the thing for him. When Mr. Madders came in, he asked defendant £65 for it; defendant offered 60 guineas for it; plaintiff asked defendant who was to pay for the horse, when defendant pulled out his purse, and said if he bought the horse he would pay for it. The horse was purchased for £64, and was sent to Whitmore station; I saw Mr. Madders at Mr. Moss's house, after the horse had been at Manchester, where he had been taken by defendant the day after he had bought him. Madders said to Moss, "I want the money for the horse;" Moss refused paying, because he said it was bone-spavined. Mr. Madders said the horse must be examined, and chose Mr. Mayer, of Newcastle, for that purpose; defendant chose Matthews, of Drayton; plaintiff refused this, and said Matthews and he were not good friends, and it was taking an advantage of him. I said, Mr. Matthews will give a just opinion; they then agreed that Mr. Matthews should examine it, and, if the horse was proved to be unsound, the plaintiff was to take the horse back, and, if sound, then Mr. Moss was to pay for it; told Mr. Matthews he was to examine the horse, and his decision was to be final.

Cross-examined by *Sergeant Talfourd*.—Have never been in partnership with Mr. Madders; I had offered £60 to Mr. Lea, of Stoke Grange, for the horse in question; did not meet John Moss at Mr. Simpson's house for the purpose of purchasing the horse; did not tell John Moss then that I had joined in the purchase of that horse and another from Mr. Lea, of Stoke Grange; did not agree to sell him the horse for £60; the horse was warranted sound at the time when the bargain was made.

Mr. John Madders, son of the plaintiff, spoke to the same effect as Mr. Hopwood regarding the purchase of the horse.

Mr. Miles Matthews, veterinary surgeon, Market Drayton, described the examination he made of the horse in question.

On cross-examination, Mr. Matthews said the horse had no spavin at all, or any thing that might be taken for it: there was a deposition in the leg, arising from the want of work.

On re-examination, witness stated that he had told Mr. Moss that the horse was perfectly sound; and though there was a little deposit about the hock, still he thought, by work and proper treatment, the horse would soon be right again; have heard that Thomas Moss was in partnership with his brother, John Moss.

Mr. Henry Grimley, examined by *Mr. Whateley*.—Am an attorney at Market Drayton: during the time I was with Mr. Warren, Mr. Thomas came to the office, and said he was willing to

pay for the horse on a stamp receipt; there was a long conversation between Mr. Madders, defendant, and myself.

Mr. Samuel Lea, examined by *Mr. Whitmore*.—Am a farmer residing at Stoke Grange; sold Mr. Madders a grey horse in September 1847; had had the horse for five years, but did not breed him, and believed he was sound: sold two horses for £100, the one in dispute and another.

This closed the plaintiff's case, and *Mr. Sergeant Talfourd* addressed the Jury for the defendant. He contended that the horse was unsound, being subject to bog spavin.

Mr. Joseph Moss, examined by *Mr. Sergeant Talfourd*.—Am brother to defendant, and a tea-dealer at Liverpool; remember seeing Madders at Newcastle; he asked me when my brother John would be coming over, I replied, "he is coming over to-morrow to my place at Whittington, Staffordshire;" I afterwards saw my brother John: saw plaintiff on the 14th October, and had some conversation with him; he met the plaintiff, who said "well, what about the horse?" Thomas Moss said, "the horse is unsound; he is going to be returned;" plaintiff said, "very well; return him to Whitmore station, and I'll have a "vet" (meaning a veterinary surgeon) from my own county to examine it, and if he is unsound I'll take him back freely; plaintiff then left us: delivered a letter and certificate (produced) to the plaintiff; the only remark he made on it was, "the 'vets' in Manchester are d——d thieves; I know more about a horse than any of them."

Mr. John Moss, examined by *Sergeant Talfourd*.—Am a brother to defendant, and a corn-merchant and cheese-factor at Manchester, under the firm of "John Fletcher and Co." but which I now carry on alone. In October last I required a horse for my work; Hopwood told me he had a horse that would just suit my purpose, and the price was £70. I said if the horse was strong, and good enough for my work, I would give him £60 for him; afterwards bid 60 guineas for it, and eventually bought it for £64, subject to approval. My brother went down next day to see the horse; the horse arrived at Manchester on the 8th of October: the moment I saw him I did not like him; there was a written warranty sent with the horse; I sent him to be examined by Mr. Lawson on the 11th October, and he pronounced him unsound, and gave a certificate to that effect, as did also Mr. Mayer, of Newcastle.

Mr. Thomas Simpson, examined by *Sergeant Talfourd*.—Am a farmer at Muckleston Wood, Staffordshire, and a brother-in-law to defendant; recollect being in company, at my house, with Hopwood and defendant. Hopwood told defendant "he had one

of the best horses in England ;" Moss bought the horse of Hopwood for £64 ; defendant's brother was to go over and see the horse ; Hopwood said plaintiff and himself were in partnership : this was on the 6th of October.

Mr. Thomas Brittles, examined by *Mr. Wade*.—Am in the employ of Mr. John Moss, as his carter ; saw the horse in question at Manchester, but did not like him ; thought there was a bone not in sight ; *Mr. Lawson* examined the horse.

Mr. John Lawson, examined by *Sergeant Talfourd*.—Am a veterinary surgeon, at Manchester, and have been in practice for eleven years. On the 11th of September examined the horse ; there was a bony enlargement on the superior spavin, and a bog spavin on each hock ; the enlargement was caused by inflammation : the horse was not lame. If put to hard work, either of those causes would make the horse lame ; gave a certificate that he was unsound on the 11th of October ; taking the horse at £64, the injuries would take at least £20 off the value.

Cross-examined by *Mr. Whateley*.—The bony enlargement, as described, seldom becomes sound ; the horse was strong and young, and about sixteen hands high.

Mr. Joseph Vincent Gibson, examined by *Sergeant Talfourd*.—Am a veterinary surgeon at Manchester, and have been in business fifteen years ; examined the horse at the Whitmore Inn, on behalf of Mr. John Moss ; found the horse unsound, in consequence of a bony enlargement on the upper pastern, and two bog spavins ; these blemishes would increase when put to work ; the horse was like an elephant : the difference in the price of the horse would be deteriorated at least £34.

Cross-examined by *Mr. Whateley*.—Have never known a horse with a bog spavin move without being lame ; the horse galloped yesterday, but he took shorter strides than was usual for horses of his size.

Mr. Mayer, examined by *Sergeant Talfourd*.—Am a veterinary surgeon at Newcastle ; examined the horse in October last, and found a bony enlargement in the hock ; it was unsound.

Cross-examined by *Mr. Whateley*.—Never said to Mr. Moss, that, if they would take £5 off, he had better keep the horse.

This closed the defendant's case, and *Mr. Whateley* replied.

The learned Judge then summed up at considerable length, and the Jury returned a verdict for the plaintiff, with damages £64.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—HOR.

SPRING BOXES FOR HALTER REINS.

HORSES high fed and little worked, everybody conversant in equestrian matters full well knows, are exceeding apt, in the course of the many idle hours they have to spend tied up in their stalls, to contract habits and vices which are no less annoying to their owners or to their grooms than they are detrimental or injurious to themselves. Crib-biting, wind-sucking, kicking, biting, weaving, casting, flying-back, striking their knees against the logs, and getting their legs over the ropes or straps by which they are fastened up, constitute the chief of these: and bad enough some of them are; and, moreover, when once established as habits, exceedingly difficult to get rid of. The discussion of these several subjects in all their various bearings, with an investigation of the means by which they are best remedied, would fill a moderate sized volume. On the present occasion we have nothing in view beyond the examination of some newly-invented *spring boxes* now lying upon our table, the intention of which is to prevent the latter of the evils above enumerated, viz. hitting the knee against the log, and getting the leg over the confining strap or rope. Before, however, we proceed to make any comment on this new invention, we owe it to experience to premise, *in limine*, that some of the before-named evils or accidents manifestly have their origin, in the great majority of cases, in *mal-ajustement* of the halter apparatus. Common sense points out to us, that the head-stall and the strap or rope, and log, and the manger-ring through which the strap or rope has to play, should be properly adjusted. When such has been attended to, for our own part we have witnessed but few accidents. Still, we are not denying that they may and do occur. Among gentlemen's horses in particular, which in general are idle, and often playful and mischievous, they are but too liable every now and then to happen; and may be, and on occasions are, attended with serious consequences. A horse, from pawing in his stall, strikes his knee against the log, and occasions a swelling upon it, which, though it does not lame, disfigures him; and, what is more, which is by no means easily or quickly got rid of, particularly after such swelling has received a repetition of blows. Then, a horse gets his leg over the strap or rope of the halter, and he may chance to get it back again, and so come off simply with a grazed skin, or

with no hurt at all perhaps. On the other hand, something may alarm the horse at the time his leg is entangled, or he may be, *coutes qui coute*, make efforts by plunging to extricate himself, and in his fright and violence may possibly break his leg, or even his neck or his back.

The writer of this once knew a horse to break his back by getting cast underneath the bail in a bailed stable.

A contrivance that was introduced many years ago, and which is still to be found in operation in some old-fashioned stables, is the concealed strap playing between two rollers, let into the skirting-boards underneath the manger, behind which plays up and down the log, out of reach and sight as well.

The spring halter-box we have now before us is, in effect at least, not very unlike this, the operation of the spring within being to cause the strap to recoil back into the box the moment the force that dragged it out is removed. To render this more intelligible—the box itself is about the shape and size of a very large padlock, and is composed of two stout iron plates, between which is lodged a circular steel spring, and around this is coiled the strap of the halter, after the manner in which the chain of the works of a watch is lapped round its mainspring: the strap running out of the box whenever sufficient pull is used, between two brass rollers, which, as often as the pull ceases to operate, the length of rope recoils, per force of the spring, back into the box. The opposite side of the box to that which gives issue to the strap is furnished with a ring and screw-staple, by which it is fastened to the manger.

Feeling desirous of ascertaining what weight or force was required to draw the strap out of the box, we suspended the box to a hook in the wall, and appended a weight to the spring-hook attached to the end of the strap. To drag the strap out to its full extent required seven pounds, half that weight proving pretty well sufficient to extend it half-way: the power requiring increasing, of course, in ratio with the length of strap drawn out: so that a horse tied up with a single box and strap would have from three to six pounds pulling at the head; with double box and strap, double that force: to which something need be added for the weight of the box, that being moveable, up and down upon its ring-staple. This to a horse while he is standing, and is full of health and spirits, may not, perhaps, be any great matter, further than the continual drag upon the head-stall, through which his nose or his poll, or the roots of his ears, may in the course of time become chafed; but it is another matter in the case of a horse that is already hanging his head from being unwell, or of one that is lying down, wishing to take his rest—a posture in which, from

the strap being drawn out so much further, there will, of course, be double the force continually dragging at his head. We cannot suppose that such pulling can be either agreeable or indifferent to a horse; on the contrary, it cannot but more or less annoy him, and, together with the creaking of the spring, which will be sure to be heard by him every time he happens to move his head, cannot fail, we should opine, materially to disturb his repose. For these reasons we cannot feel favourably disposed towards the spring halter box; though we are quite ready to award its inventor every credit for so neat and clever a contrivance.

THE VETERINARIAN, JULY 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

MR. BROAD'S "Case of Hock Lameness and Fracture of the Tibia," contained in our present number, is both curious and instructive—curious, as an example of disease rare among horses; instructive, particularly to junior practitioners, as an example of a horse's leg being broken for several days without creating any suspicion in the minds of those who look after him, or even evincing any signs to the veterinary surgeon in attendance upon him, that such is the nature of the case. In the instance before us, it is evident there had taken place in the *tibiæ* of both limbs certain changes of texture or composition, rendering them preternaturally liable to fracture; and this predisposition it was, clearly enough, that led to the breaking of the tibia in the off leg, and which would, had the animal survived, as certainly have led to the production of fracture in the near. All that casting the horse had to do with the broken leg was simply the separation and displacement of the ends of the fractured shaft of the bone; the smooth and polished aspect of the fractured edges plainly shewing that "the fracture had happened previously to her (the mare's) being operated on."

In support of this, Mr. Broad's opinion, two cases at the moment occur to our mind, of which, since they happened in our own prac-

tice, we can vouch for the narratives being correct. They are these :—

A brown thorough-bred horse, who, though not absolutely vicious yet was perfectly ill-tempered and trustless, was, in being led out for exercise, hanging back in his snaffle bridle, leering slyly upon the horse walking (likewise at exercise) behind him, when at length, with one hind foot, he managed to strike the horse, following too close to him, upon the near arm. We happened to be present at the moment of the accident, and witnessed it, and saw that the kicked horse limped exceedingly the instant he had received the blow,—indeed, to that degree, that we had made up our mind to the limb being fractured. Still, the animal hobbled along, continuing to bear a certain amount of weight upon it, and walked a distance of three hundred yards to reach the infirmary, and in doing this, to our surprise, by degrees stepped so much the less lamely that by the time he had reached his stable we began to feel pleased at our suspicions appearing to be unfounded. Considering it, therefore, after all, but the effects of “a rap upon the bone,” fomentation was ordered, and a dose of physic. The tub used for the fomentation, however, happening to be what is called “a high tub,” the lifting of the leg into it caused some little resistance on the part of the horse, who was naturally shy, and the result was the displacement of the broken shaft of the *os humeri*: the fracture—for fracture it turned out—proving to have been a very oblique one.

The next case bears closer upon the point we are desirous to elucidate. A troop-horse was admitted on the 18th January, 1842, for “kick, inner side, off thigh,” and treated by fomentations, physic, and walking exercise *daily*. All went on apparently well for several days, with the exception of the external wound, and that, instead of healing, had a sloughy aspect, and kept discharging a thin sanious matter. This, it was considered, might proceed from some injury to the bone, but no fracture was suspected; when, to our surprise, on the morning of the 26th of the month, eight days from the receipt of the kick, while the man was washing the wound with some warm water out of a pail, the animal—probably from feeling at the moment extreme soreness in the wound—struck the pail violently with the hind foot of the in-

jured limb, and immediately afterwards caught up the limb, contracting it upon the abdomen, as though the kick had caused him a fit of intense pain. We were instantly called to his aid, and found him standing upon three legs, evidently suffering greatly. On being backed for the purpose of examination, a little way out of his stall, he absolutely hopped, and could hardly be forced to do even this. He quite dreaded any manipulation of the limb: we had to twitch him even before he would submit to our touching it. This done, the secret became but too palpable—the tibia was broken; and dissection, *post-mortem*—for the horse was immediately shot—shewed that the fracture, which was an oblique one, was manifestly of several days' standing.

Cases like these teach us caution in our treatment and prognosis of injuries resulting from kicks and blows upon bones. In Mr. Broad's case, diseased as the bones were in structure, there were no hopes to be entertained of any reparation of the fracture. But in the case last mentioned (of the troop-horse), holding together so long as the broken pieces of bone did, and in spite of the walking exercise the horse took daily, it may become a question whether, had they not at length been separated by violence, they might not have had callus thrown around them, and in the end have become united. On the other hand, suppuration and abscess might have ensued, and the case, after all, have had a fatal issue.

MISCELLANEA.

A MAN WHO CAN MAKE HIMSELF TALLER AT WILL.

AT a meeting of the Academy of Medicine in Paris, a man was exhibited, who possesses the very singular power of making himself two inches taller or shorter at will. Standing erect, he can elongate the spine and contract it again by moving the sacrum, which plays like a wedge between the bones of the pelvis. When he was a child a carriage passed over his body, to the injury received at which time he attributes the power of executing this singular manœuvre. He had reached the age of forty.—*Gazette des Hospitaux*.

THE
VETERINARIAN.

VOL. XXI,
No. 248.

AUGUST 1848.

Third Series,
No. 8.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

[Continued from page 365.]

SPLINT.

HITHERTO we have been engaged in searching into the nature of lameness resulting from disease of parts commonly known by the name of *joints*, and properly called so from their possessing that structure and motion which we naturally associate with such an appellation. Now, however, we have come to the consideration of disease in a part which likewise by the anatomist is regarded as a joint, although in structure it is totally different from the afore-mentioned *proper* joint, and is capable of so little motion that such is rather to be inferred than demonstrated. *The splint bones* are attached to the sides of the *cannon bone*, as well in the hind as in the fore leg, by an elastic substance partaking of the nature both of cartilage and ligament, called *fibro-cartilage*, the fibres composing which decussate one another in passing from one bone to the other after the manner of the letter X. There is not, as in the proper or perfect joint, here either capsular ligament or joint-oil. Still it is called a joint, and, by way of distinction, a *fibro-cartilaginous joint*.

Comparatively incomplete and small in importance as joints of this class appear to be, yet were they designed to answer a useful end in the animal economy, and are they fully adequate to the purposes thereof, albeit they commonly are rendered, even at an early age, of none effect by the conversion of the fibro-cartilage composing them into osseous substance. So long as they retain their pristine structure, through the elasticity of their uniting medium, are the splint bones capable, on the imposition of weight upon them, of descending against the sides of the cannon* bone, and of springing up again into their places the instant such weight ceases to operate: from the moment, however, that their uniting material becomes osseous—inelastic, hard, brittle—all motion and

spring is destroyed; the splint bones are rendered fixtures, no better, indeed, than were they mere processes or prominences of the cannon bone itself. These few preliminary observations will, it is hoped, render the pathology of splint not only more intelligible, but, in a practical point of view, more serviceable.

THE NAME of *splint*, or *splent*—derived from the Italian word *spinella*, a splint—would seem first to have been used to denote the bone in or upon which the disease so called is seated, and afterwards the disease itself. The two small bones, in our modern nomenclature, called *metacarpal* and *metatarsal*, in their position along the sides of the *cannon bones*, or *great metacarpal* and *metatarsal* bones, have so much the aspect of splints (the old name for which is *splents*), or splinters off the shaft of the large bone to which they cling, that we can readily imagine how they came to be called *splint* or *splent bones*, and as easily understand how the appellation of the bone came to be transferred to the disease.

THE DEFINITION OF A SPLINT is simply this,—That it is an *exostosis*—i. e. a callous or osseous tumour—growing upon one, or contiguous to one, of the splint bones. Were the tumour not of such composition, or not so situated, we should not call it a splint.

KINDS OR QUALITIES OF SPLINTS.—According to SOLLEYSELL—who here, as on most other horse subjects, displays a practical knowledge that at times no less surprises than gratifies us—there are five kinds or qualities of splints. To give them (and more for the sake of gratifying curiosity than of approving of them all) in his own words—“The first is THE SIMPLE SPLINT, which but adheres to the bone of the leg, and doth not at all touch the back sinew, and is also at a pretty distance from the knee. The second is THE PEGGED or DOUBLE SPLINT (*le sur-os double ou chevillé*), which is when there are two splints, one upon the outer, the other upon the inner side of the leg, directly opposite to one another, as though they were *pinned* together through the leg, from which they derive the denomination of *pegged*. The third is the splint which ascendeth to the knee, and almost always maketh a horse to halt. The fourth is the (*la tumeur*) FUSEE, which is two splints joined at the ends, one above the other. The last (the fifth) is the little bony excrescence, OSSELET, which is *upon* the knee, and may be taken for the very substance of the knee itself, unless a man have very great experience*.”

THE ORDINARY SITE OF SPLINT is above the middle of the leg, rather nearer to the knee than to the fetlock. A splint upon or immediately under the knee-joint is an affair of complication

* Compleat Horseman, Hope's Translation, 2d edit. part ii, sect. 6, p. 95.

and danger compared to one in the ordinary situation, and so far we would and ought to make distinctions between splints: further than this, however, all specification appears groundless and useless.

A SPLINT IS DETECTED by grasping with the hand the horse's suspected leg in the ordinary manner, and tracing, with the fingers upon one side and the thumb upon the other, the inner and outer splint bones from their heads downwards to their tapering extremities. Any actual exostosis will at once arrest the hand; any rising or irregularity will create suspicion, and lead to closer examination.

THE NATURE OF SPLINT, from what has been already stated, may be said to have been anticipated. Conversion of that which originally was fibro-cartilage into bone, between the splint and cannon bones, constitutes *splint*, be tumour or *exostosis* the consequence, or be it not. Here, then, we have another kind of splint, one that we may call *insidious*, *invisible*, or *undetectible* splint. We are not certain that a splint of this latter description gives rise to lameness; but that, *in essence*, it is a splint as much as the exostosis is which stands out an inch from the bone of the leg, is most certain. But what is

THE PATHOLOGICAL HISTORY OF SPLINT? How comes it that this useful fibro-cartilage becomes transubstantiated into useless bone? The immediate or proximate cause we believe to be, increased action, amounting in some instances to inflammation, set up in the vessels of the fibro-cartilage; whereby hypertrophy, or—in such an ossific diathesis as the horse species is known to possess—ossification, is produced. Any violence or injury to bone, or appendage to bone, it is notorious enough, is in horses especially apt to be followed by exostosis; and if the hurt be to a joint or in the vicinity of one, by ankylosis, partial or complete, as well: so prone is the economy of the horse to what medical men call ossific inflammation. Commonly, we believe, this increased or inflammatory action originates in, and for a time is confined to, the substance of the fibro-cartilage interposed between the cannon and splint bones: subsequently, in many instances, the periosteum partakes of the same morbid or hypertrophic action; and the consequence is, tumidity and acquired sensibility of that membrane, in which condition, should it be put on the stretch by the formation of tumour (splint) underneath it, pain and lameness result. This is precisely the same thing that happens in nodes in the human subject, and it was the theory upon it that led to the division of the stretched periosteum for the relief of pain, whence the application of periosteotomy for the relief of lameness in splint. It is not, however, in every instance that the osseous deposition which commences in the fibro-cartilage extends beyond

the limits of that substance, and, when it does not, no tumour or *visible* splint of course results. Neither is it, perhaps, in every instance that the periosteum, even where tumour forms, participates in the inflammatory action; consequently, has no pain produced in it—not being sensible in the natural state—no lameness arising out of its tensity or augmentation of substance. Hence, as is ordinarily the case, splints exist without giving rise to lameness. What commonly, indeed, happens with horses having splints we believe to be this:—That the increased vascular action does not amount to inflammation, but is simply what may be termed super-alimentary or *hypertrophic*; and that under its influence the tumour of splint rises so gradually that the periosteal membrane, under the same sort of influence, grows as the tumour grows, and so accommodates itself to the increased superficies it has to spread over without suffering any tension. And by the absence of inflammation and tension do we account for the generality of horses having splints suffering no manner of apparent inconvenience from them.

SPLINTS BELONG TO THE FORE, SPAVINS TO THE HIND LEGS.—The late Professor Coleman used, in his “Lectures,” to lay it down as a principle, that “spavin and splint were in nature the same;” the only difference between them being that one was “situated in the *hind*, the other in the *fore* leg.” And scientific investigation of the subject will shew that, in so far as regards one description of spavin—the *low spavin*—the Professor was correct in his position. It can matter nothing in a pathological view whether an exostosis exist between bones—correlative in site, structure, and use—in the hind or in the fore limb. What is purely a splint in one case amounts to no more in the other, by which we mean, so long as the exostosis is confined to the splint and cannon bones. But, should the tumour be found placed against or having any connexion with the knee or the hock, inasmuch as those joints, though correspondent in respect to situation, differ materially one from the other both in structure and function, such an exostosis would have probably a different effect in the one joint from what it would in the other, and might on that account have a different importance attached to it, and a different name given to it. Therefore, we have no right to find fault with calling a “bony knot” upon or close under the hock a spavin instead of a splint; but surely we have a right to urge objection against the appellation of splint being still continued, when the “knot,” instead of being in the ordinary site of splint, is upon or close under the knee. Should we not be justified in giving to such a tumour some other name? Mr. Cherry has done so; he has given it the name of “spavin in the knee.” Solleysell* was well acquainted with this

* Op. cit.

kind of splint. His description of them runs—simple splints, through long and violent exercise, “mount (upwards) to the knee;” adding, “some people maintain that a splint doth not mount upwards, but only burthens and extends itself to the knee, so that it thereby interrupts the motion of the leg; but what way soever it come thither, it is certain that a splint joining to the knee lameth the horse.” The “excrescence” *upon* the knee, Solleysell tells us, “is called an osselet:” adding, that such “grows upon the inner side of the knee, never upon the outer;” and that “some horses have two of them, one upon each leg.” To splint or spavin, or by whatever name the disease may be called, in the form now under our consideration, there can be no doubt but that too little attention has been devoted by veterinary practitioners: we therefore invite their observation to the subject, while we refer them for further information on it to an excellent article on “*Carpitis*,” published by Mr. Arthur Cherry, in *THE VETERINARIAN*, vol. xviii, p. 601-607.

THE CAUSE OF SPLINT, now that its nature has been developed, will on reflection strike us to consist in any thing that may occasion undue or sudden pressure upon the splint bone, whereby the fibro-cartilaginous union between it and the cannon bone is stretched or strained, and so has its capillary circulation increased in such manner or measure that conversion of it into bone is the result, followed or not by exostosis as the case may be. Overweight or over-action at a tender age is the ordinary cause of this. In the anxiety there is to bring young horses into use, in the precocious practice of breaking and racing and hunting that exists, we cannot feel surprised at unperfected parts giving way, or being re-constructed in a different manner from the original design. Nature is forced beyond her powers, and, finding that the soft and elastic material placed for a certain wise purpose between the splint and cannon bones insufficient against weight and force, osseous material is substituted for it. Even before breaking or using the colt commences, however, the mischief may be perpetrated. A gallop, a jump, a gambol in the field or the yard, may, even in the foal, occasion the throwing out of splint. Again, a blow or other external injury may produce a splint, though this is comparatively a rare case. To whatsoever cause, however, it be referrible, the fact is notorious enough, that hardly any horse completes his fifth year without splint, either latent or demonstrable; for, as we have before remarked, exostosis or tumour is not absolutely necessary to constitute splint.

SPLINT IS PECULIAR TO THE FORE LIMB AND TO THE INNER SIDE OF IT.—Not that splint never is seen upon the *hind*, or that the *outer* side of the limb does not on occasions shew splint; but

that these are its ordinary sites. And for these reasons—that the fore limbs have more weight imposed upon them than the hind, at the same time that they experience more concussion than the hind; both which reasons apply to the inner sides of the limb, when compared with the outer, on the principle of the former being nearer to the central line of axis of the body, and of the position of the limbs and the construction of their joints being such that weight pressing from above inclines to the inner sides, as well as from the articulations of the bones, makes more impression upon those parts.

SPLINT RARELY PRODUCES LAMENESS.—Not only has unaided observation taught this, but it is a fact based upon all the best veterinary experience. Formerly, splints were regarded as great grievances. Solleysell and other old writers viewed them in this light, explaining that they caused lameness whenever they “touched,” or “interfered with the back sinews.” What, however, did Mr. Apperley, the observant and reflecting “Nimrod,” without pretending to any medical knowledge of them, say about splints?—why, that “from splint he had suffered very little. He never remembered *but one* horse out of work from that cause*.” Still, is the old notion very prevalent among unprofessional people, that splints often lame horses; and to the groom who thinks so, or to the veterinary surgeon who chooses to be of the same opinion, is such doctrine often very acceptable and opportune, inasmuch as it serves to help them out of any embarrassment they may feel to say for certain whereabouts the horse’s lameness is located. Young practitioners ought to be extremely wary how they pronounce a horse lame from splint; never, indeed, to venture to do so without unquestionable evidence that such is really the nature of the case. They will do well to bear in mind the following narrative, published in *THE VETERINARIAN* for 1829, in a paper on the subject of “Splint” read by Mr. Henderson, during the same year, to the Veterinary Medical Society:—

“Early in the spring of 1827, a Norfolk breeder brought seven or eight horses to town for sale. I was requested by a gentleman to inspect one of them, of which he had made choice. They were a lot of very clever horses, and all got by old Pretender. There was one rather remarkable circumstance,—they had all splints, but situated on the shin bone, and, as far as regards lameness, they were all perfectly sound. I mean to say, not one of them was lame; and, therefore, I considered them sound. I passed the one in question (a mare), and she always remained sound, and gave great satisfaction.

“A few days after this, a gentleman called upon me to ask if I

* *VETERINARIAN*, vol. x, p. 64.

could recommend a horse to carry a lady. Having seen one belonging to the breeder to whom I have just alluded, I took the gentleman to the stable, accompanied by his friend and servant. After they had all three ridden the horse and approved of him, notwithstanding he had a splent on each leg of large dimensions, which were pointed out to them, they bought him. On the third day I found the whole party at my house, exceedingly angry : the horse was lame, and it was insisted that the dealer should take him back. It appeared that the horse was sent the day before to the College : it had left the gentleman's stables sound, but on arriving at the College he was discovered to be very lame. Mr. Sewell examined him, and said he was lame in consequence of the splent, and recommended the gentleman immediately to return him. When I saw him on the following day, he was still lame ; but I was soon satisfied the splents had nothing to do with the lameness. I had the shoe taken off, and could find nothing wrong in the foot ; but, on pressing my thumb in the heel above the frog, the horse felt so much pain that he plunged from me with violence. On closer examination, I found it proceeded from a very trifling crack in the heel.

“After a great deal of angry contention between the dealer and the gentleman, I persuaded them to consent to my keeping the horse three days, in which time I was to give him a dose of physic, and poultice his heel. If he was sound at the end of that period, the gentleman was to keep him ; if he continued lame, he was to be returned. On the third day the horse was sound ; but, instead of the party meeting as agreed, the gentleman sent his attorney to demand the purchase-money.

“Although I was perfectly satisfied as to the soundness of the horse, yet, to make assurance doubly sure, I advised the man to take the horse to Mr. Field for his opinion. Mr. Field examined him with the greatest minuteness, and gave a written certificate that he was sound. The dealer then resisted the payment, and an action at law was the consequence. The horse remained in my stable.

“About six weeks after this, Mr. Sewell, accompanied by the purchaser, called to see the horse ; when, after having examined and ridden him, Mr. Sewell gave it as his decided opinion, that, although the horse was not lame, he was unsound, *because he had splents* ; which splents were (according to Mr. Sewell's notions) precisely the same as nodes in the human subject.”

THE NODE AND THE SPLINT ARE DIFFERENT DISEASES.—“I consider them,” says Mr. Henderson, in the same paper, “to be widely different. The one is produced by a local cause, and in many instances purely accidental ; the other almost invariably

arises from a vitiated constitution, produced by the venereal poison." Add to which, they are notoriously different in intrinsic nature.

SHOULD A HORSE REALLY BE LAME FROM SPLINT, we may expect to find that the splint and the lameness have both proved simultaneous, or thereabouts, in their appearance. An old splint is not likely to be the occasion of a new lameness; neither is it probable that the lameness should much precede the splint. The tumour will, on inquiry, most likely turn out to have been a discovery not made until the lameness was evinced; and, if felt or pressed with the fingers, it will prove warm,—hot even in comparison with the surrounding skin, and the horse will manifest tenderness in it, by flinching or catching up his leg every time the tumour is pressed upon. With symptoms such as these present, and in the absence of any other palpable cause for the lameness, we may fairly ascribe it to the pain of the splint.

It has already been stated that the lameness arising from splint is referrible to one of two causes, or to both such causes; either to the tension the exostosis occasions to the periosteum enveloping it, or to the general inflammatory condition of the tumour, and of the periosteum perhaps as well. As to the alleged other cause, viz., that of the splint "touching" or "interfering with the back sinew," for our own part we must confess our lack of observation confirmatory of this point: we do not remember ever to have seen such a case; and we certainly, until one shall actually come under notice, must withhold our belief in its occurrence.

CUTTING MAY BE THE CONSEQUENCE OF SPLINT; and this might occasion lameness from time to time almost or quite equal to that which arises from speedy-cut. A horse who has never cut before may do so from having thrown out a splint. For such an evil the remedy assuredly would be the immediate removal of the splint by operation.

IS A HORSE HAVING SPLINT TO BE REGARDED AS UNSOUND? —Were this question to be answered in the affirmative, there would be, we are afraid, remaining but few horses that could be called sound after the completion of their adult period of life. That a horse going lame in consequence of splint, or that cuts from splint so as to occasion himself lameness, is unsound there can be no doubt whatever. Unless, however, one or other of these ill consequences could be shewn to result, no importance whatever need be attached to the presence of splint. It is possible, as now and then indeed happens, that splint may, from its magnitude and conspicuous situation, amount to an eye-sore or blemish: this might somewhat disturb the question of soundness, though we very much doubt, after all, that such case of magnitude simply could be construed as equivalent to unsoundness.

THE TREATMENT OF SPLINT, when it be consequential enough to require treatment, is, in general, a simple affair. Coleman averred that "no man ever cured either a spavin or a splint;" by which he meant it to be understood, that it was not within the power of medicine to re-convert the osseous or callous matter of splint into the pristine fibro-cartilaginous tissue. What, however, is commonly understood by the *cure of splint*, is either the removal of the lameness it occasions, or the diminution or dispersion of the tumour which constitutes it. After all, however, the splint virtually remains, inasmuch as the union between the splint and cannon bones is not what it originally was, but for ever after remains bony.

Supposing inflammation to be present in or about the splint, topical blood-letting, could we any how manage its execution, would no doubt prove beneficial: after which the best remedy is a counter-irritant to the skin: and nothing surpasses in efficacy a common blister. This however need not, in the generality of cases, be severe enough to blemish or even disturb the hair. The *acetum cantharidum* is a very good application; and this may be sponged off with warm water eight or ten hours after being applied, which sponging off ought to be repeated, morning and evening, so long as any discharge continues to issue from the blistered surface.

OPERATION may be resorted to, supposing it be an object to get rid of the tumour, either because it occasions cutting or on account of its magnitude. With a fine saw, such as is used for the removal of exostosis in the human subject, the tumour, after being denuded of its periosteal covering, might easily be sawn off.

PERIOSTEOTOMY has been extolled by Professor Sewell as everything we could desire by way of remedy for splint; and, doubtless, there do occur cases in which it may be practised with advantage. In the generality of cases, however, it may be said in respect to this, as to the sawing operation, that since relief is obtainable by much simpler, and we might add, safer means too, what need is there of such comparatively formidable measures? However, should any of our readers desire further information on this part of our subject, they will find it in what we have already given under "Remedies for Spavin," in THE VETERINARIAN, Vol. xix, p. 423-5.

“MARSHALL'S SPECIFIC FOR DISEASES OF THE EYE OF THE HORSE,” WITH SOME REMARKS THEREON.

By ANTI-HUMBUG.

“At the first appearance that a French quack made in Paris, a boy walked before him, publishing with a shrill voice, ‘My father cures all sorts of distempers;’ to which the doctor added, in a grave manner, ‘The child says true.’”—ADDISON.

“There are people who find that the most effectual way to cheat people is always to pretend to infallible cures.”—BISHOP TILLOTSON.

Mr. Editor, dear Sir, — THE principles of medicine, uncertain though they be, and based as they are, to a great extent, upon pure empiricism, in spite of what may be urged to the contrary, nevertheless prove one point, beyond, I think, the possibility of much effectual dispute; viz., that no such thing as a *specific* for disease, in any of its various phases, has been, and I may with safety state never will be, discovered; since experience in the treatment of disease daily gives the lie to such a notion. A certain medicine given in one form of disease is found to act like a charm; while in a second case, to all appearance of precisely the same character, it is found to augment its virulence, and produce injurious instead of beneficial effects; for which no reason can be given save that very vague one, idiosyncrasy: a word compounded from two Greek words, signifying *peculiar* and *temperament*, or, peculiar temperament, an explanation which gives no light whatever upon the *modus operandi* of the agent used.

Change of disease requires change of treatment: this may be said to be an established axiom in medicine, and one which is totally at variance with the idea of a specific for any of its numerous forms of development. In proof that a “specific” for any one type of disease has never yet been discovered, numerous facts readily present themselves, although thousands have been puffed upon the world as such. Some time ago, a Mrs. Stevens pretended to have discovered a specific for “stone in the bladder:” hundreds whose waterworks for years had been choked up (or who *said* they had been choked up, which amounted to the same) with “gravel” and “stones,” gave testimonials as to the wonderful efficacy of the all-potent “gravel” dissolver. In short, everybody who had the gravel took it; and everybody who had not, took it in order to prevent them having it; until at last, incredible as it may appear, Government investigated the great gravel question, and actually paid the proprietor £5000 for the secret. And what, courteous reader, dost thou suppose this secret was?—why, a vile compound,

composed of egg-shells, snails, parsley, sweet fennel, and burdock seed, pounded together. Well might Sterne exclaim, "O my friends, we are but as turkeys driven with a stick and red clout to the market; or, as some drivers do in Norfolk, take a dried bladder and put peas in it, the rattle thereof terrifies the boldest." The great bugbears of the present day are "Bile," "Weak Digestion," "Impure Blood," and the "Charter;" the "specifics" for which are "Coxe's Antibilious Pills," "Chinese Digestive Pills"—which, we are told, would absolutely make the stomach digest iron—"Dr. Jordon's Golden Purifying Balsam;" and, for the last, the six points as propounded by red-headed "Feargus" himself.

Quack specifics for the horse are, however, somewhat rare. The reason is, perhaps, obvious: they, poor brutes! are supposed not to know any thing about "weak digestion," "impure blood," or "biliousness." True, the "farrier" bleeds one now and then for the "yellows," and afterwards bleeds the pocket of the owner; but, upon the whole, they escape free, in comparison with the genus *Homo*. A claimant, however, to public notice has, at last, appeared with a horse specific of marvellous powers, as the reader may learn by the following:—

"Marshall's Specific for Diseases of the Eye of the Horse."

"Mr. Marshall, Surgeon Oculist, having made *all* diseases of the horse's eye *one* of the objects of his peculiar study, has fortunately discovered a *local* remedy, singularly rapid and certain in removing inflammation of that important organ, which is so frequently destroyed when inflammatory attacks are not immediately subdued by prompt and skilful treatment.

"From Mr. Marshall's own experience, as well as from testimonials he has received *from several veterinary surgeons of known celebrity*, he has no hesitation in recommending his SPECIFIC as the most decidedly successful application yet discovered; and he can with safety state, that blindness, so destructive to the value of the animal, will in all cases be prevented where this singularly efficacious preparation is promptly made use of, and regularly applied, until all symptoms of the disease are entirely eradicated.

"*Directions.*—Five or six drops to be inserted between the eyelids every night and morning. Although one eye only may be affected in the first instance, yet the application should be used to both; the disease generally attacking the sound eye also in a few days, if not attended to. •

"The eye should be well cleansed three or four times a-day with a sponge and a *pretty strong solution of blue vitriol stone, or alum*. When used in the morning, it is better that the solution should be made warm, as the discharge in the night will be considerable, which must be carefully washed off before the drops are applied. Should the inflammation run high, take away some blood, and an opening ball occasionally will be of service. The stable to be well ventilated, and let the horse have moderate exercise.

"Where the SPECIFIC has been used in some instances for weakness of sight only, from the discharge of humour which took place, *the eyes for a few days have appeared worse*; but the treatment being continued, the irritation soon subsided, the discharge became less, and the sight again restored to its

natural strength. This is noticed to prevent doubt either as to the efficacy of the remedy when such cases occur, or to the possibility of injurious consequences arising from its application under any circumstances whatever; neither does its use occasion the least painful sensation.

"The above forwarded (free of carriage) to any part of the country, upon the remittance of ten shillings to Mr. Corfield, Chemist, 11, New-street, Birmingham, sole agent for the Midland Counties."

Such are the pretensions of this new remedy, as set forth by the discoverer. Let us examine the above a little in detail, and see how Mr. Marshall is consistent with what we know to be *true* respecting diseases of the eye of the horse, and also what he (Mr. M.) himself states. The circular commences by announcing a "Specific for diseases of the eye." But, in reading through the circular, the reader is surprised with a statement made by the writer which proves that, after all, it is no specific whatever—"Should the inflammation," says Mr. M., "*run high, take away some blood, and an opening ball occasionally will be of service. The stable to be well ventilated, and let the horse have moderate exercise.*"

Now, if these drops be a "*specific*" for disease of the eye, why, in the name of common sense, bleed the animal and give "an opening ball occasionally," and ventilate and exercise and use "solutions?" A specific needs no auxiliary; nay, in fact, one would be apt to suppose such would be injurious, as tending to alter the required effect of the remedy upon the diseased organ. Again; to take away blood in such cases, and "occasionally" give "an opening ball," and wash the eye with mild astringents, such as he recommends, is just the practice which veterinarians adopt, and in the majority of cases their patients recover; so that any one pursuing such a method, and at the same time using the ten shilling Specific, and the case recovers, of course the bleeding, and the "*occasional opening ball,*" and the astringent washes, would have done nothing:—The Specific!—the Ten Shilling Specific!!—would have done it all.

What is more wonderful still, this remedy cures eyes when they are not diseased:—"Although one eye only may be affected in the first instance, yet the application should be used to *both*, the disease generally attacking the sound eye also in a few days, if not attended to." Truly this Specific is "SINGULARLY EFFICACIOUS." Mr. Marshall may be a "surgeon oculist," and one, too, who has "made *all* diseases of the horse's eye one of the objects of his peculiar study;" but certainly, if he has, I am of opinion that he does not see very clearly himself, otherwise he would never have written such nonsense as the following:—"He can with safety state that blindness, so destructive to the value of the animal, will in all cases

be prevented where this singularly efficacious preparation is promptly made use of, and regularly applied, until all symptoms of the disease are entirely eradicated." This certainly is very luminous; it is very like telling us, that, if a horse has diseased eyes and perfectly recovers, the animal will not be blind. Of course not; who supposes he would? Any person ambitious of fame as an author, and who specially aims at simplicity of style, I would recommend to seriously study the above quotation: it borders closely upon what the Germans would call the ideal of simplicity.

In conclusion, then, I have to observe, that as Mr. Marshall has "testimonials" in his possession "from several veterinary surgeons of known celebrity," and as he appears anxious to possess more such, if this should meet his eye, and it would in any way forward his interest, he is at liberty to distribute it in any manner he may think proper: for we "can with safety state," that those who spend ten shillings upon "this singularly efficacious preparation" will be so thoroughly satisfied of its "specific" virtues, that, if it fails to cure physical vision, it will certainly effect good in restoring the mental.

PROTRACTED PARTURITION IN THE SHEEP.

By J. YOUNGHUSBAND, V.S., Greystoke, Cumberland.

Mr. Editor,—If the following case, regarding that useful animal the sheep, should be found to contain any thing worthy a place in your valuable Periodical, please to record it.

May 15th, 1848.—Requested by my friend, T. O., of Linewath, a large sheep proprietor and an intelligent agriculturist, to lend my assistance to a ewe that was thought to be under the influence of parturition. She had been examined by a young man, a son of the owner, who on former occasions had assisted when the case was not desperate; but in this his skill proved unavailing, since, according to his statement, he could feel the lamb, but in no way could draw it out.

16th.—On visiting the animal this morning I found slight labour-pains (or what appeared to be so) shewing themselves, and at uncertain periods. The soft parts of generation were found apparently in a condition such as to admit of an easy exploration, though rather swollen, and presenting a slight inflammatory blush, which might have arisen from the previous manuduction. During the intervals of ease she would eat a little cut grass that was offered

her, and seemed but little disheartened: I, therefore, well oiled my hand, &c., and, with a little manœuvering, introduced it so far within the vulva and vagina that I could easily detect the mouth of the uterus, which appeared to me totally impervious, but did not feel to possess that gristly cartilaginous character which I have found in cattle. I now used my utmost skill, but could not detect the smallest opening into the uterus, it feeling as if completely closed up. In making this examination I could detect the fœtus in utero, but not, as I imagined, situated so as to expedite delivery, had that been attempted. The idea now struck me it might be a case of false labour, which I communicated to the owner, letting him know that, as far as I could judge, as the animal was under no immediate danger, we had better defer our assistance, wait awhile, and see the result. To this he consented; but still he put the questions—Could she not be operated upon either by dividing the os uteri and trying to extract the fœtus, or by performing the Cæsaean operation, or, as my friend termed it, taking it out at the side? To the first query I made answer, that since the edges of the os uteri were so closely approximated, and its mouth so completely, as it were, sealed up, and since, from the small size of the animal, so little space was allowed for the operation, I considered it would be a most difficult and therefore an unsafe operation. And, as to the second, I gave a flat denial, not considering it, under existing symptoms, a warrantable operation. But if he would respite the patient for twenty-four hours or so longer, and more favourable symptoms should not be found presenting themselves, but, on the contrary, worse should make their appearance, I would then use my utmost efforts to relieve my patient. Well, in this also we agreed, and I left with the usual instructions recommended in such cases.

17th.—Called to see my patient—found her in a recumbent position, ruminating, without any apparent pain; looking altogether, in fact, as if nothing ailed her. With difficulty I caught her to examine her parts. I found the inflammatory symptoms abated, though still a little relaxed, and the udder shewing a little fuller. I now informed the owner that our case appeared more hopeful, and that, if he would keep her in a quiet situation for a few days, all might yet be well. To make short, from this period the animal remained easy, feeding and ruminating as usual upon cut grass, &c., up to the morning of the 19th; when, on visiting her—lo and behold—was found by the side of its mother a fine young lamb, sent into this world of troubles without the aid of man. And both have done well.

Now, Mr. Editor, suppose I had taken the case up in another

light, operated for I knew not what, killed my patient, lost the confidence of my employer, had to suffer under the pangs of my own conscience for doing what ought not to have been done, could I have expected to have escaped that censure which undoubtedly would have been my just portion?

Well! at all times the saying may not prove true, that "all's well that ends well;" but in this case I think it has been verified.

The case has taught me a strong lesson of caution in regard to prognosis, and is calculated to teach others acting under similar circumstances; at the same time that it affords a striking illustration of the well-known remark, "that the resources of Nature, in every thing which relates to parturition, are infinite*."

July 10, 1848.

PUBLICATION OF THE REGISTRIES OF VETERINARY SURGEONS.

To the Editor of "The Veterinarian."

Sir,—WITH reference to the proposed measure of registration, it is suggested for the consideration of the Council, to recommend to the profession, in order to protect the legitimate standing in public estimation of graduated members of the Royal College of Veterinary Surgeons in London and Edinburgh, that the names, date of diploma, residence, &c., be published, once or twice half yearly, in the leading county newspapers throughout Great Britain: the regular members residing within each respective county to defray the expense of advertising. Those possessing the qualification would at once see the advantage of such publicity. It would be the means of deterring "the self-styled veterinary surgeons" from assuming a designation or position which is usurped to the disadvantage of the qualified member, or practised upon the credulity of the public, not conversant with the exact standing of those having the regular diploma from the recognised schools.

Your's faithfully,

R. B. P.

July 1848.

* * * The Council have had this in contemplation.—ED. VET.

* *Vide Reports of Dr. Denman.*

PERICARDITIS IN A COW, SUPERVENING ON DIFFICULT AND PROTRACTED PARTURITION.

By JOHN S. SIMMONS, V. S., Thame.

ON the afternoon of the 4th of June I was called in to see a cow belonging to Mr. Crook of Strabbington, Bucks: she had been trying to calve the whole of the morning, assisted by the servants.

Upon examination, I found the fœtus lying with its hind quarters towards the mouth of the uterus, rather on one side, and could only get hold of the tail and one fore leg, which was lying back under it. I immediately proceeded by fixing an instrument against the posterior part of the pelvis, by which means an assistant pushed the fœtus sufficiently back for me to get up the hind legs, and in this way I extracted the calf. The cow appeared so much exhausted, that I ordered a gallon of gruel to be made for her, with a few cloves boiled in it. In an hour after this was administered the cow got up and began to feed, and, to all appearance, with the exception only of slight straining, was quite comfortable. The pains, however, increased towards night, and I was rather surprised to find, upon examination, that she had another calf inside her. This was extracted without much difficulty. The cow now seemed once more quite comfortable, ate and drank, and went on well until the 17th, on which day I found the udder swelled to an alarming extent. The whole of it was suffering under violent inflammatory action, and nothing like milk could be drawn from either quarter of the near side; there was also present difficult respiration, continual hard cough, and grunting, upon being compelled to move in the least. Pulse intermittent. Symptoms, in fact, in every respect as in inflammation of the lungs. In the first place, I bled her to the amount of four quarts, and by this she appeared to be much relieved; but in a short time after the blood ceased to flow the symptoms returned. I now bled her to fainting (which, I suppose, required the taking away of about two quarts more of blood), and then I blistered her sides. The udder I kept fomented the whole of the day, and I gave her a laxative drink.

18th. — Much better; gave antim. tart. potassæ nit. and digitalis.

28th. — Opened the udder, from which flowed, I should suppose, three quarts of thick matter. This appeared to relieve her very much. The cow now fed a little. Nevertheless, she continued to lose flesh surprisingly until the 12th of July, on which day she died.

Post-mortem Appearances. — The chest contained a very large

quantity of water. The whole of the viscera healthy excepting the heart, which was in a singular state from, as I consider, a deposition of coagulable lymph over the whole surface. The pericardium was inflamed, and quite full of a yellow fluid in every respect like oil.

*** We look upon the above interesting case as one of *metastasis*. Unusual excitement was aroused in the system, and for an undue time kept up in it by the severity and protractedness of the labour. This febrile excitement would probably have got vent through the natural secretion of the udder, had not inflammation there put a stop to it. The consequence was repulsion upon the heart. Or, was it that the cow *took cold* which produced this? The inflammation, in its results, had very much the character of what we call *rheumatic inflammation*. Mr. Simmons has kindly sent us the heart for inspection, and a more strange-looking production, as well as beautiful specimen of disease, it has never been our lot to behold. The following is our own account of it:—

The heart is uniformly coated with a substance which, in general aspect and disposition, being made up of layer over layer, and in the sensation it gives to the feel, resembles, save in colour, more than any thing we can compare it to, what is called the *dead man's flesh* of a lobster; though in colour, being of a very light pinkish hue, it is more like so much soft fat, spread in masses one upon the other over the surface of the heart. Although it exhibits considerable firmness and solidity when cut with the knife, yet has it not much toughness, being easily rendible when torn by the fingers. Were it not for the space in which a crown-piece might lie around the apex of the left venticle, and the localities around the summits of the auricles, bordering on the roots of the large bloodvessels, this adventitious covering to the heart might be said to be *complete*, every other part of the organ being concealed by it. It is most abundant around the middle or largest circumference of the heart, being in many places thereabouts an inch or more in thickness; from which parts, both upwards and downwards, it diminishes in thickness. When cut into, the substance exhibits no mark or trace whatever of vascularity—apparently, indeed, is wholly inorganic, seeming to be, as no doubt it is, the result of effusion from acute *pericarditis*. The muscular substance of the heart underneath it appears less red (of a *pink* hue) and fibrous than usual, and is softer in consistence and finer in texture, as though it had been much encumbered in its action by the burthen everywhere imposed upon it. The membrane lining the cavities of the heart manifest no other change than heightened uniform redness. The valves preserve their normal structure. Taking the heart altogether, as it presents itself to view, we can

but repeat, a more extraordinary and beautiful specimen of disease it has never been our fortune to inspect. The impression it must have made on the mind of Mr. Simmons, when he first on opening the animal discovered it, we can feel well assured will, like the one it has made on our own, be many years before it be effaced.

ED. VET.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—HON.

A PRACTICAL TREATISE ON VARIOLA OVINA, OR SMALL-POX IN SHEEP; containing the History of its recent Introduction into England; with the Progress, Symptoms, and Treatment of the Disease; also the Experiments instituted to ascertain its peculiar Features, and the best Means to avert its fatal Consequences. Illustrated with Coloured Plates. By JAMES B. SIMONDS, Lecturer on Cattle Pathology, &c. at the Royal Veterinary College. 8vo, pp. 157. Ridgway, Piccadilly; and Churchill, Princes-street. 1848.

NEXT to those awful visitations of Nature, storms, earthquakes, and volcanoes, nothing—save it be a French revolution—sounds more portentously upon the ear than the outbreak of some “noisome pestilence,” come it in the form of plague on man, or in that of murrain amongst man’s flocks and herds. In a populous, crawling-alive country like ours, wherein horses and cattle and sheep are regarded not less as individual property than as the pride and wealth of our nation, any new and fatal disorder breaking out among them will be sure to attract the earliest attention, to become at once an object of solicitude to the farmer and grazier, of observation and study to the veterinarian. That the present is not the first appearance of *variola ovina*, or sheep-pox, in Britain—that it has been both known and described in times past—and we might add, since those times, forgotten—there is on record evidence enough to dispel all doubt concerning. But “it has never until now existed here as an epizootic,” says Mr. Simonds;

an assertion in which he is borne out by no less authority than that of Youatt, whose words, in giving the history of the same disease, are, "It never reached Great Britain, although it has thinned the sheep flocks in every district in France opposite the English coast." In our immunity from it so long there really seems something surprising. Proximate as the French and English coasts are, and free and frequent as has been the intercourse between them almost ever since the establishment of peace in 1815, and lax or laxly enforced as our laws touching the importation of cattle and sheep notoriously are, we can but marvel that variola ovina has not long ere now been as prevalent and destructive as pleuro-pneumonia has turned out to have been. At last, the unwelcome visitor has come among us, and we are sorely afraid may prolong his stay beyond either our calculations or our desires; since "accounts are frequently reaching" Mr. Simonds "of its (the sheep-pox) having broken out in different and in *new* places in the kingdom." And now, no doubt, our readers will become curious to know how the ovine plague at last contrived to make its *entrée*, and when and whereabouts. Mr. Simonds shall inform him.

"On September 4th, 1847, I was consulted by Mr. Statham, farmer, of Datchett, near Windsor, with reference to a cutaneous disease of a destructive nature that had broken out among his sheep. I was informed by him that he had purchased fifty-six sheep of the Spanish breed in Smithfield market on the 26th of July. Before putting them with others, he placed them in a separate pasture, with a view to ascertain if they were free from Eczema Epizootica, which so frequently makes its appearance after sheep have been driven from one place to another. No symptom of this disease having shewn itself at the termination of a week, the sheep were allowed to mingle with a flock of about two hundred 'Downs,' which at that time appeared to be in perfect health.

"A few days subsequently, while going over his grounds, Mr. Statham saw one of the 'Spanish sheep' standing apart from the others; and, on examining it, he found the surface of its body covered with eruption, which he thought resulted only from the stings of wasps or hornets, and on that account the animal was not removed.

"On the following day several more of the 'Merinos' were found to be similarly affected; and from this time the disorder continued to spread, and many of the sheep died.

"It was about a fortnight after the two flocks were pastured together that the malady *first* shewed itself in the Downs, and these seemed to suffer more from it than the Merinos. The flocks were now separated; still the disease continued to advance, and daily losses were sustained.

* * * * *

"We have ascertained that the fifty-six Merino sheep purchased by Mr. Statham were brought by the ship 'Trident' from Tonnigen, on the coast of Denmark. When disembarked they appeared to be in health, and were sold by the salesman to whom, with other sheep, they were consigned. We have not succeeded in tracing the subsequent distribution of each separate lot of this cargo, but we are assured that many of the animals still continue well. It is, therefore, evident that, in this particular instance, the malady was imported from Denmark, but this unfortunately did not prove to be a solitary case of its introduction.

"Within a day or two of the arrival of the 'Trident,' the 'Mountaineer' and the 'Princess Royal' came into port, each vessel having on board a number of Merino sheep brought from Hamburg. The whole number of sheep which arrived by the 'Princess Royal' was 507, and these were exported by three different persons in the following proportions: 216 by A.; 200 by B.; and 91 by C.; so that the fact of some of these sheep having escaped the disease is easily accounted for, as they, in all probability, came from different localities, and were free, when exported, from small-pox in its incubative stage, and were not exposed to infected animals at a time when the disease was communicable. Some of the 507 sheep above referred to were sold to the butchers, and others to farmers as 'stock sheep:' the latter were bought, in several quantities, on the 26th July, by Mr. B. Weall, of Woodhall, Pinner; Mr. Goodchild, of Kingsbury; Mr. Pitman, of the same place; and Mr. Choke, of Barking: those purchased by the two last-named gentlemen are said to have continued in health ever since. Mr. Goodchild's sheep, however, shewed symptoms of the disease very shortly after arriving at his farm, their illness being attributed to his having had them dipped or washed, for its true nature was not suspected. That portion of the cargo of sheep of the 'Princess Royal' which was purchased by Mr. Weall consisted of 80 Merinos; and on the same day he bought 166 other sheep of the Merino breed that had arrived by the 'Mountaineer.' These two lots were placed together, and, subsequently to being sent to Pinner, were equally divided between Mr. Weall and his brother. In each moiety the disease shewed itself, being first observed among the eighty sheep, about ten days after their purchase; and from them it rapidly extended to the others. Out of those belonging to Mr.

B. Weall, twenty died in the acute stage of the malady; twenty-seven more were sacrificed; and the residue was disposed of at a low price, so that his loss probably amounted to about £50. The losses of Mr. J. Weall were, however, not so great."

The transmissibility of variola ovina by contagion, either as the result of inoculation or of contact or intercourse with diseased sheep, is a fact in the minds of all the best writers on the subject, in those foreign countries in which the disease has for a series of years been prevalent, established beyond any reason for question or doubt; still, we do not find fault with Mr. Simonds for searching for further proof of such facts, since it must be satisfactory to him, and will be to our readers likewise, to have ascertained that the sheep-pox is a highly contagious disease, and a disease that has its origin in contagion; to which we may add, on excellent continental authority, that it is *infectious* as well—by which we mean, transmissible through the medium of the *air*, without contact either mediate or immediate. Delafond declares the infection to be communicable—circumstances, we take it for granted, proving favourable—at a distance of two or three hundred yards.

The ready communicability of the disease through inoculation being known, and at the same time it having been observed that, when "caught" or taken in the *natural* way, the disease was apt to prove malignant and dangerous, it was to be expected that, in countries where its ravages occasioned heavy losses, inoculation should be resorted to as a means of substituting a lesser for a greater evil, or by the direct infliction of the one staving off the other altogether. And we feel, in our own mind, from the nature and amount of the evidence, foreign though it be, bearing on this point, convinced of the great advantage of inoculation, notwithstanding Mr. Simonds' "too limited" experiments have not shewn the same result.

"Our experiments are too limited to suggest correct conclusions; and they have shewn a result so different, that, were we to found an opinion of the merits of ovination on them alone, it would not be in favour of the practice. The deaths have been at the rate of 20 per cent.; and even greater losses have attended Mr. Ceely's experiments, as he informs us that four sheep died out of fifteen which he inoculated. Nevertheless, in the event of sheep-pox becoming an established disease in this country, ovination must be

adopted as one means to stay its ravages ; and, as we shall hereafter shew, vaccination cannot be used in its stead."

We do not find fault with Mr. Simonds for refusing to "pin his faith upon the sleeve of any man ;" on the contrary, he has his full right to the maxim,

"Nullius addictus jurare in verba magistri."

In a case, however, where experiments scanty, if not isolated, come to be opposed to such a host of facts, touching the point in question, as stand on record, we do think that it becomes our duty to yield to the weight of authority, even though that authority be not of indigenous growth.

Vaccination has been tried. And though it cannot be said to be altogether powerless or resultless on sheep, yet do the effects observable from it shew that its operation on ovine blood is extremely feeble—too feeble, indeed, to admit a hope of its turning out to them the same protecting influence against the small-pox as it has providentially proved to human kind. "After the numerous experiments, the results of which has been given," says Hurtrel d'Arboval, in his article "Vaccination," "coupled with the inferences naturally deducible from them, there appears to us no reasonable room for doubt, nay, for further withholding conviction, that vaccination proves no preservative to sheep against the small-pox."

But, not only is *variola ovina* both contagious and infectious, it is what may be called *cubative* as well ; by which we mean, it has the property, after being caught or taken, of lying latent or dormant in the constitution for a certain length of time before it breaks out, or, by what we denominate "symptoms," manifests itself. Against the invasion of a formidable and dangerous malady like this, every body would be for opposing effective barricades ; but when we come to consider how *insidious* as well as formidable is the nature of our assailant, it becomes not so easy as it might at first have appeared to construct such a *cordon sanitaire* as shall perfectly insure the safety of our flocks at home, at the same time that it does not offend the traffic in sheep and cattle carried on between this country and the continent to the reciprocal advantages of both. We have no book in our library which furnishes us with the laws of importation and exportation, as pertaining especially to cattle and sheep ; but Mr. Simonds has supplied us with a sug-

gestive code of his own for the future regulation of the said traffic, or, at least, of so much of it as relates to the importation of sheep, which, in his own words, we now submit to our readers:—

“We suggest,” says Mr. Simonds, “that all the *sound* sheep which had thus been exposed to the contagion during the passage shall be sent to the dead-meat markets; but that the carcasses of the diseased shall be buried, and their skins burnt.

“That the losses sustained in consequence thereof shall be borne by the importers; as thereby, to protect their own interests, they will endeavour to prevent unhealthy animals being put on board.

“That a market set apart for the sale of foreign sheep and cattle, and to be holden weekly, shall be established at each place of importation, to which all the animals that had passed the scrutiny of the inspectors shall be sent; and that under no circumstances shall our native breeds be allowed to enter it for sale.

“That all the sheep arriving in the intervals between the market-days, and all those turned out unsold, shall be placed in lairs especially provided for their reception, and at a distance sufficient to preclude their being mingled with our sheep.

“That printed forms be issued to the salesmen, which they shall deliver to the purchasers of any number of the animals, directing the butchers to kill those bought by them without any unnecessary delay; and pointing out to farmers and others the absolute necessity of completely isolating the sheep for three weeks after they arrive on their premises; recommending also an examination of them now and then during that period.

“That, if the disease should break out notwithstanding the adoption of these precautionary means, the person whose flock is affected shall send a report of the circumstance either to the Board of Trade or to some officer appointed to investigate the matter, so that immediate steps may be taken to confine the disease to the farm or place, and to lessen its fatality among the animals.

“We are well aware that this scheme is open to objections: it is not, however, put forth to be acted upon without modification, but to arouse attention to the importance of doing something to preserve our flocks from this dreadful scourge, seeing the imminent danger to which they are daily exposed.”

Our reader will not have accompanied us thus far through the pages of the interesting work before us, without learning that its author fully concurs in the opinion very generally adopted by those who have written on the same subject, viz. that, *in nature*, sheep-pox is identical with human small-pox.

“That variola does not shew *precisely* the same local effects in

the sheep as in man, we admit, and, indeed, its progress and symptoms vary in the different domesticated animals; but these diversities are rather to be referred to the special arrangement and development of the component parts of the integument than to any real change in the nature of the malady. That these diverse appearances are but modifications of the same affection is further proved by the fact, that the causes which produce, and the laws which govern, the extension of small-pox, both in man and in the inferior creatures, are identical."

Independently, however, of there existing striking resemblances between the symptoms, constitutional as well as local, of the two diseases, their causes will be found to be the same, viz. contagion, or inoculation and infection: their tendencies prove alike destructive in the natural form, but modified and mitigated in both instances by inoculation; both diseases likewise admit of division into *distinct* and *confluent* varieties, the latter, as compared with the former, being for the most part of a malignant and dangerous character.

Mr. Simonds' work will supply a want created in our veterinary literature through the introduction of a disease which, if known to any extent in this country before, was too little heeded to arouse any effective medical attention to it. On the continent of Europe, variola ovina has long been known, from some parts, indeed, has hardly ever been found to be absent; and this has given rise to the production of "Treatises" and "Memoirs" on the subject, constituting, in the *tout ensemble*, a mine of information to which we can sanguinely and safely refer any of our readers who may feel desirous of prosecuting their inquiries into the nature, causes, and effects of this, to us, novel and fearful disease.

The writings of Sacco, Vitet, Hurtrel D'Arboval, Lebel, Delafond, Miquel, and Thomières, have all thrown more or less light upon the subject, and Mr. Simonds has, for the most part, availed himself of these excellent authorities. He appears to have perused pretty well the whole of them. Nor has he rested satisfied with perusal; but has, as far as his opportunities would let him, put their assertions and opinions to the test of actual observation and experiment. Thus, through the researches and experiments of Mr. Simonds, are we now in the possession of an English work on Sheep-pox; and for it he has our thanks, and will receive the thanks of the profession

at large, as well as those of the agricultural world. No veterinarian practising in the country will like to look at his library, and not see a book like this in it. Supposing he should be called to a case of sheep-pox, and be unprepared either to recognise or treat the disease, what will be his feelings? Whereas, possessing Mr. Simonds' work, perusing it, and attentively examining, as he reads on, the admirable plates it contains representative of the disease, he will find himself "armed at all points," and with cheerful confidence will set about his novel and responsible undertaking.

NEW INVENTIONS.

DURING the years 1846 and 1847, respectively, somewhere about 750, making a total in both years of about 1500, patents have been granted for sundry new or modified inventions, some few of which have fallen to the share of the horse department, and not a few of which have had more or less concern with cattle, sheep, &c. Patents having horses for their exclusive objects have for the most part concern with their *equipments*, either such as are worn in the stable or out of the stable; and those both being now reduced, through improvements from time to time made in them, to great simplification and plainness, there is little room left for further improvement, and consequently little encouragement for patentees to embark therein either their wits or their money. Some signal and lasting benefit, however, has in times past been achieved in this manner, benefit to the patentees as well as to the community at large: witness spring stirrups, spring bars, patent saddle cloth, patent tugs to harness, &c. The headstall now in general use in our best stables—out of distinction called the *hunting headstall*—is not, never was, a patent: had it been, a good round sum of money might have been made through it; since nothing can exceed its simplicity of construction, and yet, acting at the same time in the manner of a neck-strap, it defies the veriest trickster at "slipping his collar," to disengage himself from its broad strap round his throat. We have now upon our table

A PATENT METALLIC HALTER-ROPE;

Or, rather, we have two ropes here, one made of copper wire, the other of galvanized tin wire, woven in the same man-

ner as the string is of which the common halter-rope is composed, and about the same size, or, if any thing, somewhat smaller in volume than hempen ropes are in general. The strength of this metallic rope is incalculable—it would hold, not a horse merely, but a ship: it might, it seems to us, be made a cable of, or rather ship-cables might be made in such manner. Nor is the tin rope so objectionable in its weight, it not being heavier than the ordinary iron chain used in cavalry and other stables for fastening horses up. The copper rope, however, is objectionably heavy. Neither is the durability of the metallic rope at all doubtful; that being, we should opine, hardly inferior to its great strength.

The fault we find with the article in question is this:—The metallic rope when forcibly bent, to use the angler's phrase, "kinks," i. e., it *remains* bent; nor will the weight of the log annihilate or take out the flexure: the consequence whereof would be a disposition or liability to hang in the ring of the manger, instead of slipping through it readily as a hempen rope, even after being twisted, would immediately do; from which would arise danger of the horse getting his leg over it. And, should such an accident happen, the injury accruing would be likely to be greater than what a hempen rope would inflict, and particularly were one of the wires composing the metallic rope to slip out of its coil, or break: indeed, then, there is no knowing what abrasion or laceration might be inflicted. Such a pin-like presentment might rip open a bloodvessel.

It is proposed, however, to encase the metallic rope in leather—make it a sort of nucleus to a leathern piping. This certainly would remove a part—and perhaps the most serious part—of our objection. There would still, however, remain a disposition to kink, and therefore there would be diminished freedom in its running through the manger-ring. And, after all, we cannot say we like it near so well as the common halter-rope, or halter-strap.

BRONCHOTOMY BREATHING-TUBES.

MR. DAWES, veterinary surgeon, has been so kind as to lay upon our table two instruments of this denomination of foreign in-

vention. They are intended for introduction into the windpipe through the aperture made by bronchotomy, and to remain therein so long as circumstances may require. Any description we could give of them would hardly, without a drawing, convey a notion of their construction. They are, we should say, both of them large, cumbersome, weighty affairs, and yet they evince ingenuity. Mr. Dawes, however, we understand, is about getting one of the same kind made in German silver—the present ones being made of pewter and brass—which, we should say, would get rid of much of what we now complain, and be a great improvement. Perhaps, we may hope, when he has done so, he will kindly favour us with a view of it; and, should it be found to answer, will permit us to have it represented upon paper for the benefit of the profession at large.

NELSON'S PARTURITION FORCEPS.

Dear Sir,—AS I said before, I really have not had that practice with Nelson's Forceps that I could wish; but I am inclined to think the principle is good, and that they will be found extremely useful in many instances. In some cases I *have* found them useful; in others, they have slipped off. When the skin is pretty thick, the parts will bite; but if it is thin, they will slip off.

In mine, the nick of No. 1 is too weak, and on screwing up tight, the mouth of the Forceps gaped open and did not hold. The nicks on No. 3 ought to be deeper. I prefer No. 2 for general purposes, especially for putting in the nostrils, instead of putting hooks into the orbits. The great beauty of them is, that they will not tear the uterus, should they break out. There would be great danger in using them, when at their full length, if the cow should be standing, should she fall down, as the other end might hit against the wall or ground, and force the forceps off, and through the uterus. Plugs should be used at the joints instead of screws, as it is difficult to unscrew them. I could not unscrew them, and even broke the screw-driver. The screws are made of bad materials. Mr. Nelson acknowledges plugs would be best.

He has sent me three small sizes of forceps—about five inches

long—on the same principle, to use with cords. I have used the *original* small size with every success in ewes.

I am very sorry I cannot give you a more decisive opinion : by this time twelvemonth most likely I shall be able to do so. We are in want of many instruments in this line, which, I think, I could invent.

Your's in haste,

W. A. CARTWRIGHT.

Whitchurch, July 10th, 1848.

Home Extracts.

YORK MEETING OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

[From "The York Herald.]"

THE present meeting has been one of the most brilliant, in every respect, which the Society has ever held ; and, we understand that so far as regards the rank and numbers of the individuals who have been present, it has never been equalled. There has been one general desire amongst our fellow-citizens to promote the success of the meeting, and it has passed off in a manner that will be long remembered. With regard to the stock, we do not feel called upon to make any critical remarks, especially after the highly favourable opinions expressed by those much more competent of judging of the merits of the animals exhibited than ourselves.

Of the great utility of this and kindred institutions we have already spoken. We may, however, be allowed here to observe, that they awaken a wholesome competition amongst agriculturists generally. The breeders of one particular locality are also enabled, through their instrumentality, to witness the improvements which other farmers have effected. Experience thus becomes concentrated into one focus, and a general improvement is the result, which is participated in, not by the farmers alone, but also by the public generally. Another important feature of these associations is the encouragement they hold out for the improvement of agricultural implements of every description. One of the principal features of the present exhibition has been the display of steam-engines for agricultural purposes. For some time the prizes offered by the Society under this head excited little attention. There was only

one exhibited at Newcastle, and only three at Northampton; but, at the present meeting, no less than thirteen engines were entered for the Society's prize, and their comparative strength was tested scientifically by the use of a dynamometer.

The application of mechanical science and skill thus not only meets with reward and encouragement through their institution, but greater facilities are provided for the more full development of the capabilities of the soil. Viewed in this light, and estimating the many advantages which may be diffused around, agricultural associations are worthy of the highest encouragement; and, under similar judicious management to that which distinguishes the Royal Agricultural Society, they will do much to place the science of Agriculture in that exalted position to which it has so many claims from its own essential importance, and to confer upon it that reward and encouragement to which it is fully and indisputably entitled.

THE PROGRESS OF AGRICULTURE, AND THE ROYAL AGRICULTURAL SOCIETY.

[From "The York Herald."]

OF the antiquity of Agriculture we cannot write without going back to the first man that ever dwelt upon the earth, for it is coeval with creation, having formed the leading object of public and private anxiety in the primitive ages of the world. The Scriptures frequently allude to it; and not only sacred but profane history contains most interesting accounts of men of importance, who have contributed to its honour, and aided its propitious advancement. It descended, in its pristine simplicity, from age to age, amongst our venerable forefathers, ere the general deluge swept man and beast from the face of the earth; and when the mighty waters subsided, the green carpet of Nature again soon covered alike the hills and the vallies, proving that the pastoral life was renewed; whilst the waving corn-fields also proclaimed the bounty of the Creator, and the renovated powers of his rescued and intelligent creatures. Egyptian hieroglyphics recorded the immense value of Agriculture. Athens re-echoed its praise. The historians of Greece and Rome produced powerful evidence to the same interesting fact; and their seers placed amongst their idols various heathen deities in honour of the productions of the earth, whilst their poets sounded their praises in spirited and classic song.

Passing further down the stream of Time, through ages of intel-

lectual advancement and digression, we find the cultivation of the soil never lost sight of. Whilst progression was rife in distant lands, the rude British plough, and the blind process of the husbandman of those days—who, like the mole, groped his way contentedly, without any conception of the capabilities of the soil—were all that England could boast, and are still in historical recollection. These proceeded as the acme of perfection, till the invasion of the Norman, in 1096, when French and Flemish husbandry were introduced, the Norman clergy being all superior agriculturists, and preferring the Norman plough with two wheels to the old British plough with its single stilt, already alluded to. Proceeding through the next 500 years, we find little more improvement till 1534, when one of the Judges of the Common Pleas directed his mind to the subject, and published several works “On the Philosophy and Practice of Agriculture.” It, however, was a philosophy little understood in those days; and, therefore, agriculture still kept slowly on till the beginning of the last century, when Platts, Evelyn, Tull, Maxwell, Young, Sir John Sinclair, Kirwan, Sir Humphry Davy, and other talented writers, directed their minds to the science, and benefited mankind by the communication of their intelligence, grounded upon experience. In 1793, Sir John Sinclair immortalized himself by founding the Board of Agriculture, over which he presided for many years. The next great movement was in 1837, when Earl Spencer, at the annual dinner of the Smithfield Cattle Club, proposed the establishment of a society for the development of the agricultural resources of the country. The proposition was highly approved, and, in May 1838, a notice, signed by Earl Spencer, the Duke of Wellington, the Duke of Richmond, Lord Portman, Earl Fitzwilliam, the Earl of Ripon, &c., was issued, announcing a meeting of all those who were friendly to the formation of “A National Agricultural Society.” The meeting was held; 250 noblemen and gentlemen enrolled their names as “The Agricultural Society of England;” and thus commenced the truly important body, which, with its augmented numbers, has just honoured this city with its presence.

By a record of its proceedings, we find that its first meeting was held at Oxford in 1839, when there were 2000 persons at the dinner, a majority of whom were members. The following year they again mustered at Oxford, when, the Society having increased to 4000, they were honoured with a Royal Charter of Incorporation. In 1841 the meeting was held at Liverpool, and the members then numbered 5382. Bristol was the next place of assembly, and their numbers at that time were 6500. In 1843 they went to Derby, where they added 500 members, making the number 7000. In 1844, they were at Southampton—1845, at

Shrewsbury—1846, at Newcastle-upon-Tyne—1847, at Northampton—and, in 1848, they visited the ancient city of York. There was a proportionate increase at each of those places; the numbers, therefore, are at the present time exceedingly great, and are daily increasing.

We shall now turn to the vast importance, not only of agriculture generally, but also of great public bodies like the present, and even of minor local societies, for the promotion and improvement of the culture of the soil. When we look at the necessities of man, and when we consider that the proper cultivation of the soil is the ordained means of providing for those necessities, the great importance of husbandry then becomes apparent. Its chief worth, however, is not fully developed until an increasing population brings with it an augmented demand. Then, and not till then, is ingenuity put to the test; and the cultivator of the earth calls to his aid the acuteness of the mechanic and the wonder-working science of the chymist. To direct their operations in one powerful and combined progression, and to extend the requisite information far and wide, requires sacrifices and an energy which cannot be expected from solitary individuals. Hence the great importance of Agricultural Societies of every description; but more particularly of National Societies, such as the one to which we are alluding; for they give life and influence to minor bodies, and rouse to active usefulness even the drowsy rustic of modes and years gone by. Socrates seems to have thought agriculture very important, for he termed it “the nurse and mother of all the arts.” Sully, one of the ablest statesmen of his time, has used a similar figure of speech. And Gibbon has declared husbandry to be the foundation of all manufactures, because art is provided by Nature with its materials. In short, so great an importance has been attributed to agriculture, that the total neglect of it in Ireland has been deemed one of the principal causes of all its miseries. Scotland, also, was not much better than Ireland fifty or sixty years ago; but the agricultural movement in England has now extended across the Scottish borders, and it is greatly improving its march in this truly important science.

The present rapid progress, and the certain duration and continued improvement of agriculture, to the end of time, shall now, in conclusion, be briefly noticed. A very few years have passed away since the British farmer was a mere automaton, moving as if by instinct in the beaten track of his “rude forefathers.” The modern progress we have named, however, through the power of agricultural associations, broke upon his vision with renovating effect. He saw, he wondered, and, finding nobles and heroes of the land engaged in the movement, he soon welcomed its advan-

tages, and advocated its cause. He thus became intellectually exalted far above his predecessors; and, to the eternal credit of The Royal Agricultural Society, that intelligence increases, as years roll on, wherever they assemble and exercise their renovating influence. To the members of that useful and prosperous society we would, therefore, respectfully urge increasing efforts to aid the cause of British agriculture. The success of the past prompts to an onward course—a course of usefulness to the whole population, and which will secure to them the grateful acknowledgments of millions of the human race yet unborn; and confer honours upon them, far more pure and lasting than all the empty distinctions of proud potentates, and the boasted titles of blood-stained conquerors.

We have thus traced the origin, progress, and great improvement of agriculture to the present time; and we are authorised, by Scripture, to look forward to a period, when the latter days shall be so far influenced by religious principle, that the people “shall beat their swords into ploughshares, and their spears into pruning-hooks.” War shall then give place to the peaceful arts, and agriculture, with all its improvements, will become even of greater importance than it has ever been in departed ages.

IMPORTATION OF DISEASED SHEEP.

Mr. BAGGE (in his place in the House of Commons) inquired whether Government was aware of the rapid increase of small-pox among sheep in this country, and whether orders had been issued to prevent the importation of diseased sheep and the sale of such stock.

Mr. LABOUCHERE, in reply, stated that, about the end of September last, the Government received information that a disease had appeared among the sheep, being a species of small-pox of a fatal and contagious description; and that there were strong grounds for supposing that it had been produced by the diseased sheep imported from abroad, principally from the north of Germany. A system of close inspection of all sheep imported from Germany was immediately instituted, and such other measures adopted as were thought necessary. The Government had also obtained a report on the subject from Mr. Simonds, a veterinary surgeon, which stated that he had examined six ships, containing 2300 sheep, and that he had not found a single case of disease among them. Thus the case stood until quite recently. He had since

received information that the disease had appeared extensively, and in an aggravated form, in the Eastern counties. He had been in communication with the Board of Customs, and had been informed that since October last, although there had been a strict system of examination with regard to all the cattle and sheep imported, only one case of a diseased animal had been found, and that had been imported from Hamburgh last Saturday (July 8). That that had been immediately destroyed. He could assure the hon. member that the attention of the Custom House officers, particularly at the Eastern ports, had been directed to the subject; and orders given, not only that all diseased animals should be destroyed, but that flocks of which they formed a part should remain in quarantine for a certain number of days.

Mr. W. MILNES asked who inspected the cargoes?—because, if the inspection was left to the Custom House officers, it would be of little use. As the disease was of a most fatal character, and likely to spread over the country when once introduced, he hoped the Government would take means to have a proper system of inspection instituted.

Mr. LABOUCHERE *believed* that skilful veterinary surgeons were employed as inspectors; at least, such was the case at the port of London, and *he believed it was so at all the other ports.*

Mr. HENLEY inquired whether the House were to understand that *all* the sheep that arrived were inspected by a veterinary surgeon.

Mr. WODEHOUSE asked, whether the Government would have any objection to lay the papers connected with this subject on the table.

Mr. LABOUCHERE said there would be no objection.

Times, July 14, 1848.

In the House of Lords (June 18th).

THE DUKE OF RICHMOND begged to call the attention of Government to the fact, that diseased sheep had within the last twelve months been imported from the continent. The introduction of foreign sheep into this country was the effect of the tariff of 1844; the only excuse pleaded for which was, that the people of England ought to have their mutton cheaper, for cheapness was everything at the present day. Those sheep brought with them disease, which would destroy more English sheep than the number of foreign sheep imported. Very unwholesome food was thereby afforded to the country; and the Government were bound to do their utmost to ascertain the circumstances under which the

disease had appeared, and what were the best means of staying the plague. He should move for a return of the number of sheep and the quantity of wool imported into the United Kingdom in the year 1847; and he begged to ask what precautionary measures had been taken by Her Majesty's Government in respect to the contagious disease in sheep.

THE MARQUIS OF LANSDOWNE did not feel bound to enter into any argument with his noble friend as to the merits of Sir Robert Peel's tariff. He was a supporter of that measure, though not one of its authors. The prevalence of some apprehension if not of alarm on this subject might have the salutary effect of putting persons on their guard, more especially farmers, and of inducing them to adopt proper precautions. It was known that for many years this disease had subsisted in Holstein, without spreading itself farther. It had done so, however, subsequently, and of late years there was reason to apprehend it had been introduced into this country. In point of fact, he believed *not more than one infected sheep had been known to have been introduced since the commencement of this year.* Inoculation had been found to have the effect of mitigating the virulence of the disease. As the law at present stood, *flocks could not be detained on entry into this country;* and an order in Council might be found necessary to authorise the adoption of precautionary measures.

LORD BROUGHAM was glad to hear so favourable a statement as that of the noble Marquis. He hoped it was not too late. The returns were then ordered.

Times, July 19, 1848.

IMPORTATION OF CATTLE.

IT will be recollected that, in the autumn of last year, the attention of the officers of the revenue was especially directed by the authorities to the state of the cattle and sheep which should be imported from abroad; and also in the early portion of the year 1845, in consequence of a certain disease being on those two occasions prevalent among them on the continent. The officers of the Customs' department have again been made acquainted that information has recently been received that the disease, called "variola ovis," is now greatly extending in some parts of the country, especially in two of the eastern counties, and that apprehensions exist that it may be caused by the importation of infected sheep; and they have, therefore, been directed to exercise the greatest vigilance in enforcing the precautions previously authorised to be adopted in this matter; with a further notification that they are

forthwith to state, for the information of the Board, whether it appears that sheep are now being imported at either of the ports in the kingdom in an infected state. Directions to the above effect have been given to the officers of the revenue at all the ports throughout the kingdom; and although there may, perhaps, be no absolute necessity for apprehending the infected state of the cattle which are at the present time imported from the continent, yet these salutary precautions, taken by the Government authorities in the matter, will be duly appreciated by the public.

It will be recollected that this subject was alluded to in the lower house of Parliament during the past week, when an assurance was given by Mr. Labouchere that it would receive the full attention of the Government authorities.

The Times, July 20, 1848.

THE SMALL-POX IN SHEEP.

To the Editor of "The Norwich Mercury."

Sir,—I KNOW you feel highly interested in all matters relating to agriculture, and hesitate not to ask a small space in your widely-circulated journal, for the purpose of making a few observations on that direful malady, the small-pox in sheep, which I am sorry to say has just made its appearance in this neighbourhood. In doing which, however, I do not wish to create unnecessary alarm; my object being merely to put agriculturists and others on their guard as to admitting any fresh lot of sheep on their farms without having first ascertained the existence or non-existence of the disease in question, which I think they will be enabled to do by attending to the few following hints:—The leading symptoms of small-pox are, a separation of the infected animal from the flock, a peculiar arching of the back, a drooping of the ears; a closing of the eyelids, amounting in some cases almost to blindness; and a pustular eruption, extending more or less over all parts of the body, but particularly those destitute of wool or covered with hair only; such, for instance, as the cheeks, the skin inside the arms and thighs, the under surface of the tail, udder, &c. There are other minute symptoms, which it is not necessary to mention, the above being the most prominent ones, and such as any person without a knowledge of anatomy can detect. The disease is highly contagious and infectious; so much so, that a lot of sheep have been known to contract it in consequence of having been penned by the side of others in a diseased state, and that without any commixture.

The deaths in all cases, where it has broken out, have never been less than 20 or 25 per cent., and in some instances, I believe, they

have increased from this amount to 40 or even 45 per cent.;—a fact in itself of sufficient importance to put us on the alert, not only with regard to individual pecuniary loss, but looking at it in a national point of view. In the lot of sheep I have seen in this neighbourhood, amounting to eighty, there are at present eighteen dead; but there are evident signs of the disease progressing with the others, and the result will, I fear, exhibit as many fatal cases as have already occurred elsewhere. In conclusion, I would advise those who wish for further information on this subject to peruse a work lately published by Mr. J. B. Simonds, Lecturer on Cattle Medicine, &c. at the Royal Veterinary College, which contains an account of the first introduction of the disease into England, with many other interesting and minute particulars respecting it.

I remain, Sir, your most obedient servant,

THOMAS WELLS.

Castle Meadow, Norwich, June 29, 1848.

PREVENTION OF CRUELTY TO ANIMALS.

A BILL has been brought down from the House of Lords, entitled "An Act for the more effectual Prevention of Cruelty to Animals." It first repeals the acts 5 and 6 William IV, cap. 59, the 7th William IV, and the 1st Victoria, cap. 66; and proceeds to enact, "That if any person shall, from and after the passing of this act, wantonly and cruelly beat, ill-treat, over-drive, abuse, or torture any animal, every such offender shall for every such offence forfeit and pay a penalty not exceeding £5." Clause 3 defines acts of cruelty as follows: "That to use or employ any animal in drawing or assisting to draw any vehicle, or in carrying any person or any load, or in doing any work whatever, whilst such animal is, by reason of infirmity, disease, or injury, unfit to be so used or employed, or in doing any work whatever which is manifestly beyond the strength of such animal, shall be deemed to be a wanton and cruel abuse of such animal, within the meaning of this act; and if any person, being the owner of any animal, shall use or employ, or cause, suffer, or permit, any such animal to be used or employed in drawing or assisting to draw any vehicle, or in carrying any person or any load, or in doing any work whatever, while such animal is, to the knowledge of such person, by reason of infirmity, disease, or injury, unfit to be so used or employed, or any work whatever which is manifestly beyond the strength of such animal, every person so offending shall be deemed to have wantonly and cruelly abused such animal, within the

meaning of this act." The barbarous and disgusting "amusements" of bull-baiting, cock-fighting, badger-matches, &c., are put down by a special proviso, imposing a penalty of from £5 to £10 on the keepers of such places for every day on which they may keep them open or use them for such purpose. Compensation will be exacted from any party wantonly injuring animals serviceable to their owners. Other merciful provisions are made concerning the pounding and slaughtering of cattle, &c.—*Times*, July 22, 1848.

REMARKS ON DEODORIZATION AND DISINFECTION, AND ON SIR WM. BURNETT'S DISINFECTING FLUID—THE SOLUTION OF THE CHLORIDE OF ZINC.

By T. STRATTON, M.D., Surgeon R.N.

HAVING during the last nine months, since August 1847, made extensive and varied use, in various emigrant fever hospitals and elsewhere, of Dr. Sir Wm. Burnett's disinfecting fluid—the solution of the chloride of zinc—I beg to offer a few remarks on some of its effects and uses. I shall consider, first, its antiseptic; secondly, its deodorizing; and thirdly, its disinfecting properties.

I. As an antiseptic, it is exceedingly useful for preserving dead bodies for the purpose of dissection. The strength is one part of the fluid to forty parts of water; with this the bloodvessels are injected before using the common paint injection; afterwards, while the dissection proceeds, the parts may be occasionally sponged with the diluted fluid, or the body may be immersed in it for an hour or so every four or five days. Some other antiseptic agents have the effect of blunting the knives used in dissection, which is not the case with this fluid. Other solutions are apt, when the parts become dry, to leave gritty particles. The chloride of zinc is so deliquescent that this cannot happen with it.

For preserving anatomical preparations, the diluted fluid may be used instead of spirits of wine.

Besides preventing further decomposition, the fluid destroys any disagreeable odour from decomposition that has already commenced. It is needless to enlarge on the beneficial consequences of using this fluid in dissecting-rooms, where students breathing the contaminated air for several hours a day have their digestion impaired, their general health injured, and are thus made more than others liable to suffer from exposure to infectious diseases. A great obstacle to making post-mortem examinations in private houses is the disagreeable odour attendant thereon, and which is only questionably remedied by the odour from chloride of lime; but as the Burnett

fluid is odourless, it is consequently greatly superior to this last, and it also perfectly overcomes the autopsic odour. When one has made an autopsy, there is generally some odour attaching to his hands for several hours, but by dipping them for a minute or two in the fluid, this odour disappears. In Montreal the Burnett fluid has been successfully used for anatomical purposes by Dr. G. Campbell, Dr. Arnoldi, jun., Dr. Wright, Dr. Baker, and others, and has come up to the recommendations given of it by Professor Sharpey, Mr. Partridge, Mr. Bowman, and Mr. Pettigrew, of London, Sir James Murray of Dublin, and others concerned in the teaching of anatomy. In Quebec the fluid was employed by Dr. Racey, while making post-mortem preparations; and I shewed to several medical men there the difference between a portion of subject treated with this fluid and another part left untouched.

II.—*Of the Deodorizing Properties of the Burnett Fluid.*

1. With regard to its action on feculent odours, we may observe that feculent matter contains—1, ammonia; 2, sulphuretted hydrogen; 3, decomposing animal matter, combined with ammonia; 4, occasionally fresh animal matter (as in some diseases where there is a motion soon after taking food). When the fluid is added to the above matter, the chloride of zinc acts on the fresh animal matter, prevents decomposition, and the consequent evolution of disodour; also, on the decomposing animal matter, preventing further decomposition; part of the chloride of zinc gives its chlorine, and the sulphuretted hydrogen gives its hydrogen to the ammonia to form odourless muriate of ammonia; the sulphur combining with the zinc to form sulphuret of zinc. As the ammonia is the vehicle of the feculent odour, feculent matter ceases to have any effluvium as soon as the ammonia becomes muriate of ammonia.

2. With respect to the action of the fluid on urinous odours, among the ingredients of the urine are—1, ammonia; 2, decomposing animal matter (mucus); 3, according to Prout, phosphuretted hydrogen is occasionally present; 4, water.

The solution instantly and permanently removes the odour of foetid urine by there being formed muriate of ammonia and phosphuret of zinc; while part of the chloride of zinc, or oxide of zinc, acts on the decomposing animal matter.

3. The odour of bilge-water depends on sulphuretted hydrogen: and this gas is produced on board ship from the wood decomposing and resolving itself into carbon, hydrogen, and oxygen, and these acting on the sulphates of lime and magnesia in sea-water. I find that the fluid instantly destroys the odour of bilge-water; there being formed sulphuret of zinc and muriatic acid. Any remaining

chloride of zinc which has no sulphuretted hydrogen on which to act, has a preservative effect on the wood, and contributes to prevent the further formation of sulphuretted hydrogen.

4. In crowded transports and emigrant ships, and especially in bad weather, the air becomes very foul; also in crowded barracks, badly constructed as regards ventilation, the use of the diluted fluid (1 to 40) is highly conducive to comfort and health.

5. The plan of many jails is so faulty that there are many cells which it is nearly impossible to ventilate, and which (even after removing all the bedding, &c., in them) retain a peculiar and disagreeable odour. I found that this odour was removed by waving, for a minute or two, a flannel cloth wet with the diluted fluid; as in the case of ships and barracks, or any other crowded places, there may also be some of the fluid sprinkled over the floor*.

6. When the diluted fluid (one part to sixty parts of water) is applied by sponging to the persons of typhus patients, it removes the peculiar odour emitted by them. Except where cold sponging is indicated, the fluid ought to be used of the temperature of the patient.

7. In hospital wards full of typhus and dysentery cases the air becomes exceedingly impure, and in cold weather, and at night, ventilation often cannot be had recourse to. In such cases the disagreeable odour is removed by waving flannel cloths wet with the diluted fluid (1 to 40) two or three times a day for a few minutes at a time, and by sprinkling some fluid on the floor. Where there is dysentery, a small quantity of fluid may be poured into the utensils over night. The odour emitted from the surface of the body of a dysentery patient is much lessened by sponging him with tepid diluted fluid (1 to 60). I found that having the fluid used in the way of waving and sprinkling once a day, when the same process was repeated next morning, there was no disagreeable odour, or almost none, perceptible; this, too, was in badly-ventilated wards crowded with fever and dysentery patients. I found that the proportion of one ounce of the strong fluid (making forty-one ounces of the diluted fluid) was sufficient for every ten persons; the price of the fluid (as at present advertised) is three shillings sterling a quart, or about one penny an ounce; so that to give the sick the daily benefit of having the fluid used, it would cost an hospital tenpence a day for a hundred sick, and eight shillings and fourpence for a thousand sick. The expense of any article for hospital use on the large scale is an important consideration, and besides the great superiority of the Burnett fluid in other respects, it is much cheaper than chloride of lime and other

* Where the fluid is applied to woodwork, the use of soap, soda, or potash, should be avoided immediately before or after its application.

agents used for similar purposes, as these are usually sold, and considering the comparative quantities of them that are requisite. As for the Ledoyen fluid (not to speak at present of the radical error its proposer made in taking such a poisonous substance as lead for a base), I believe it is advertised for sale at sixpence sterling for a bottle containing about eighteen ounces, while the same sum will purchase about 246 ounces of the diluted Burnett fluid.

Nearly all the medical practitioners of Montreal and Quebec have made trial of, and are completely satisfied with, the anti-bromic powers of the Burnett fluid.

III.—*Of the Disinfecting Properties of the Burnett Fluid.*

Some of our best medical authorities do not agree in the meaning they appear to attach to the word *disinfect*, some restricting it to an action on infectious miasm, and others apparently extending it to an action on offensive odours not in any way connected with infectious miasmata. By a disinfecting substance, I mean one which either—1, destroys infection; or, 2, greatly lessens its intensity.

The question of infection is one of the most subtle and difficult in medicine, and has called forth the most decided and opposite opinions from writers on the subject of fever. As infection is known only by its effects, and eludes any attempt to subject it to experiment, it is, in consequence, allowable to call in the aid of theory, as long as this is reasonable, and not at variance with facts.

As Professor Alison observes—"If hypotheses are introduced sparingly, and the grounds on which they rest fairly stated, they are admitted to be part of the process by which the knowledge of the truth is attained, even in the most strictly inductive sciences; and those who profess to reject and despise them are not those whose opinions are the most exempt from their influence."

According to Liebig, ammonia is always generated in sick rooms, and particularly so where the disease is infectious; he also considers that this ammonia is the vehicle of the infectious principle, and what renders it volatile, so that if the ammonia be removed the infectious essence ceases to act. By freely using the chloride of zinc solution in a sick room, the ammonia becomes muriate of ammonia, and the air of the apartment is, according to this theory, completely disinfected: this is presuming that all the air in the room has been brought under the action of the chloride of zinc solution.

If the chloride of zinc has not been sufficiently used, there may

still remain some infectious principle, but in a degree much less intense, so that—to take a crowded typhus ward—instead of many visitors to it being attacked, and this with a severe form of the disease, only a few are attacked, and that slightly.

We may also theorize on the effect of the fluid on the patients themselves. We suppose, for example, a person has received one dose of infection, giving him typhus fever; he then comes into a crowded typhus ward, where he and the others are constantly emitting infectious miasm from their lungs and the surface of their bodies; this is respired by them over and over again, so that instead of there being one, there are two chances against them; instead of the original quantity of infection to which they were exposed, they continue to inhale additional doses of it during their illness; now, if by using the fluid we wholly, or even only partly, remove the typhous principle in the air, we are giving them a better chance of recovery.* Likewise, during convalescence, if the air in the ward be tolerably pure, the digestion and appetite of the patients improve much more rapidly than if the atmosphere be foul; their strength returns more quickly, and their convalescence is much shorter; they run less chance of a relapse, and the hospital gains their beds to accommodate new patients.

By using the fluid, the medical attendants, students, and nurses, are either protected from infection, or at least run much less risk of being taken ill.

If we had a fever hospital, throughout the whole of which the fluid was daily used, and if physicians, students, and nurses, who had not had typhus, continued for four or five months to visit without being taken ill, this might be considered a proof that the fluid perfectly destroyed infection. To use the fluid in part of the hospital only would not be sufficient, as air from non-fluidized wards might be admitted, or the nurses might be visiting these, and be there infected. In the past season I had not an opportunity of making a trial like the above, as, generally speaking, the physicians and nurses had already had fever.

In the autumn of 1847, in the Quebec Marine and Emigrant Hospital, I had the fluid used (latterly) in seventeen wards and sheds containing 317 patients (being about a third of the whole number in the hospital), of whom about two-thirds were ill of typhus, and the remainder of dysentery. When I began visiting them, these wards were the worst in the hospital for ventilation, &c.; half of them were in the stone building; in other respects

* In different hospitals in Ireland, it was found by Mr. Cronin, Dr. Lindsay, and Mr. Drummond, that the mortality became less after they began to use the chloride of zinc solution.—*See Report on the Solution of Chloride of Zinc.*

they were situated similarly to the other wards and sheds. I had the fluid used once a day, in the way of waving and sprinkling, and I daily noted the number of deaths in those wards, and compared this and the number of inmates with the total mortality and total sick of the hospital as published weekly in the newspapers. Thus, for the week ending 4th September, in the wards where the fluid was not used, there was one death in about every nine patients; and in the wards where the fluid was employed, there was one death in about every fourteen sick.

On account of having to be occasionally absent from Quebec for a day or two, I was unable to note daily for any great length of time continuously, the mortality in the fluidized wards; but I have no reason to doubt that while the fluid was used there was a difference in the comparative mortality somewhat like what is stated above. The difference is one too great to have depended on accidental circumstances, and I do not see to what it can be attributed, except to using the chloride of zinc solution. It was not till the middle of January that I compared the deaths in the fluidized wards with the total mortality as published in the newspapers, when I was greatly delighted to find that my exertions had had such beneficial results. If we suppose the case of a fever hospital throughout the whole of which the fluid had been used, and that after this the mortality became less, some might say that this arose from the disease becoming milder; but, in the instance given above the experiment is more decided, the trial is clearer, and the mortality in fluidized wards is, compared with that in non-fluidized, between the same dates.

IV. Chloride of zinc has been given inwardly in the dose of a grain or less, two or three times a day, in chorea, epilepsy, &c.

V. In surgery, chloride of zinc is occasionally used. I lately saw a case of lupus, where the Burnett fluid (undiluted) was found to be as effectual and a more convenient form than the solid chloride of zinc.

The Burnett fluid, diluted (1 to 130 parts of water), has been found very beneficial as an application to chronic and scrofulous ulcers (by Mr. Erasmus Wilson, Dr. Allan, and others); and in mercurial sore throat (by Mr. Flynn). The fluid diluted (1 to 60 or 80) is useful as a lotion in erysipelas, and as a bath in psora, prurigo, pruritus, and other cutaneous diseases. It has also been used as an injection in gonorrhœa. I have no doubt it will be found an excellent remedy, much diluted (as 1 to 120) as an injection in fœtid otorrhœa, and as a gargle in some throat diseases. Diluted (1 to 140), it removes the fœtor from mortification taking place as after frost-bite. The fluid undiluted, or with an equal part of water,

and introduced on the point of a pen into the cavity of a tooth, is a good application in some cases of toothache. The action of the diluted fluid on ulcers is twofold—it removes the fœtor, and also it improves the action of the sore in some alterative manner.

VI.—*Of the Burnett Fluid, as compared with some other Agents employed or recommended for similar purposes.*

1. Burning sulphur in the air, and so producing sulphurous acid, has been employed for purifying the atmosphere, but the odour is unpleasant, and the vapour is sometimes irritant to the air-passages.

2. Dr. Johnstone proposed, and Dr. Carmichael Smith obtained £5000 from parliament, for suggesting the employment of nitrous gas (made with nitrate of potass and sulphuric acid); but this gas is disagreeable to most persons, and in some diseases its inhalation is injurious.

3. Producing chlorine gas with common salt, manganese, and sulphuric acid, is troublesome and disagreeable, and making it with oxymuriate of potass is the same.

The use of the chloride of lime is attended with the inconvenience of making white spots on floors, carpets, furniture, or any other surfaces to which it is applied; it likewise changes colours, and is corrosive. The inhalation of chlorine gas is disagreeable to most persons, and in some chest diseases it is injurious, so that among the mixed cases in a large hospital its general employment is inadmissible.

The diluted Burnett fluid is preferable to the above agents, as while it destroys odours, it is of itself odourless, and it does not injure the colour or texture of cloth; on the contrary, it is largely used for the preservation from decay of cloth and wood. In her Majesty's dock-yards, canvass and timber are immersed in it, and these articles are found to last much longer than others.

VII.—*Of the Burnett Fluid as compared with Ledoyen's Disinfecting Fluid.*

As the Ledoyen fluid is a solution of the nitrate of lead, it is, like the other preparations of lead, liable to produce some one or other of their long-known bad effects, such as cholic, palsy, pain in the course of the spine, giddiness, coma, apoplexy, constipation, indigestion, wasting of the muscles of the body generally, and permanent decrepitude: likewise, employed in typhus, according to the Ledoyen method (by means of wet cloths over the person), it is apt to produce a sedative and depressing effect, which is exactly

the opposite of what is required in that disease. In Dr. Hall's *British American Medical Journal* for March, 1848, there are two cases mentioned of lead-colic arising from Ledoyen's fluid being applied to ulcers. In a case lately, near Montreal, of sloughing of the hands after frost-bite, Ledoyen's fluid was applied to the hands on account of the fœtor, and this was followed by frequent, painful, and nearly ineffectual efforts to have a stool, and by other signs of intestinal disorder. At Quebec there were three cases of typhus, in which the proprietors of Ledoyen's fluid used it largely, cloths wet with it were kept applied to nearly the whole surface of the body, and other wet cloths were hung over the bed, and in the room; these three cases were, I believe, the only instances in Canada, where the fluid was much applied to individual patients ill of typhus, and in them it was considered that the lead had a depressing effect: the three cases terminated fatally.

The two proprietors of Ledoyen's fluid asserted, that their fluid prevented one from taking typhus, and also that it certainly cured one already ill of that disease. The fact of both of them being seized with typhus is, so far, a contradiction of their first assertion; and the fact of one of them unfortunately dying is, so far, a contradiction of the second assertion. This last case is one of the three alluded to above, where the Ledoyen fluid not only did no good, but where it probably contributed not a little to the fatal event. Some may say that this case ended fatally because the patient was seventy years of age; but this could not be the reason of the death of the other two patients treated with Ledoyen's fluid, as their ages were, I believe, 35 and 38.

The Ledoyen fluid acts as a corrosive of metals, and I heard of two instances where water-closets were injured, and made leaky, in consequence of a quantity of it having been thrown down there. I saw some tin vessels full of holes, in consequence of the fluid having been left in them for some time. It was found also to injure the texture of cloth, so that sheets, pillow-cases, and towels that had been wet with it, were rendered nearly useless.

I witnessed several comparative trials of the two fluids with regard to their power over feculent odours, and in all of them, I considered that the Burnett fluid had much more effect than Ledoyen's. In Montreal, some of each fluid was added to a quantity of feculent matter in a couple of vessels: a few minutes after, feculent odour had a good deal disappeared from the L. vessel, and almost entirely from the B. vessel. The vessels were kept, and a week after, I looked at them: on the B. vessel being stirred, there was no odour; on the L. vessel being stirred, the odour was nearly the same as it was before the fluid was added.

In Quebec, Dr. Painchaud, sen.*, of the Marine and Emigrant Hospital, wrote out an excellent plan for testing the comparative deodorizing powers of the Burnett and Ledoyen fluids, by which the judges were to give their opinions, unconscious of whose fluid it was, in favour of which they were voting. The result of this trial† was in favour of the Burnett fluid; and it afforded no little amusement to the other umpires; and caused no small vexation to himself, that M. Ledoyen's zealous and enthusiastic colleague was found to have voted (of course, unconsciously) against *their* fluid: M. Ledoyen himself conducted his own part of the trial, while I experimented with the other fluid, and neither of us voted.

Pereira, after enumerating the various medicinal and the poisonous effects of the preparation of lead, describes each preparation separately, and of the nitrate of lead he observes, that "its general effects are similar to those of the other soluble salts of lead."

A non-professional reader glancing at these pages might think that, as he has heard of lead preparations being employed as internal medicines, Ledoyen's solution cannot be very objectionable; but he may be informed that, when a lead preparation is prescribed internally, it is in small doses, in some diseased state, such as internal hæmorrhage, &c., where a sedative and astringent remedy is peculiarly suitable; where its effect is daily watched by the medical attendant, and new directions, if necessary, given for its use; and where, also, it is combined with opium, or some other medicine, to prevent its producing its objectionable effects, which, however, sometimes appear, notwithstanding all possible precautions.

Far different, however, is the method which the proprietors of Ledoyen's fluid recommend for using their solution of the nitrate of lead: they think that it ought to be used indiscriminately, and without any precautions, by the public generally; nor would it be a sufficient defence of its use to say that the nitrate of lead, acting on the ammonia in the feculent matter or in the air, and so becoming nitrate of ammonia, would prevent any bad consequences: as any remaining nitrate of lead not decomposed by the ammonia, might go on to produce one or other of its poisonous effects.

While M. Ledoyen's fluid is so objectionable, on account of being a solution of a poisonous salt, Sir Wm. Burnett's fluid, the

* Whom I take this opportunity of thanking for the obliging disposition he shewed while I was making trials of the fluid in the hospital.

† Detailed in the Montreal Courier of the 20th October, and other papers, and in the London Medical Gazette of the 26th of November, and Dublin Medical Press of the 8th of December. One or two periodicals erroneously supposed that the judges in this trial considered they were experimenting on something more than the deodorizing properties of the fluids.

solution of the chloride of zinc, is formed of a base which is perfectly innocuous. Wood and Bache say of the chloride of zinc, that "it has the advantage of not giving rise to constitutional disorder from absorption." In conclusion, there appear to be just grounds for stating that the general use of Ledoyen's fluid is unsafe, and that if employed by the public indiscriminately, it most likely would very frequently do much harm.

Next to perfect ventilation, I would place the use of Sir Wm. Burnett's solution of the chloride of zinc, which, for improving the quality of vitiated air is greatly superior to all the other artificial methods of doing so, including M. Ledoyen's solution of the nitrate of lead.

SIR WM. BURNETT'S DISINFECTING FLUID—MODE OF APPLICATION.—ONE PART FLUID TO FORTY PARTS WATER.

To purify sick rooms and the wards of hospitals, workhouses, prisons, factories, and crowded places, the between decks of ships, &c.—Moisten, with the diluted solution a piece of flannel cloth, attached to a long rod, and wave it through the air of the apartment for ten minutes at a time, in addition to which the floor should be mopped or sprinkled over with the same, if necessary, several times a day, and a small quantity of the same dilute solution should be put into the close-stools and bed-pans. The water-closets should also be cleansed with it, and a couple of gallons occasionally thrown down each. N.B.—*For use on board ships, between decks, and in places where, from imperfect means of ventilation, it may be inconvenient to wet the floors.*—Moisten with the diluted solution thick pieces of flannel-cloth—the thicker the better—and wave them through the air of the apartments for ten minutes; and then suspend them in the most convenient manner to the deck-beams, or across the rooms; and keep other similar pieces of cloth, thoroughly and repeatedly saturated with the same solution, in flat dishes upon the floors. It is essentially necessary that the bilge-water in the hold of the vessel should be purified agreeably to the instructions given below.

To purify fever wards in cases of death.—When a patient dies of fever, the body should be sponged over with the dilute solution, and the clothes and bedding should be immersed and kept in a sufficient quantity of it, for forty-eight hours, before being washed. The floor should be well mopped over with the solution. Flannel, moistened with it (as before recommended), should be waved through the room.

To purify the clothes, linen, &c., of sick persons.—Immerse the articles in the dilute solution, as directed in sick rooms.

To prevent the communication of infectious disease.—Sprinkle the dilute solution over the whole of the floor of the apartment, and very slightly on the coverlid of the patient's bed. The clothes used should be immersed in the solution, and afterwards thoroughly dried. Moisten pieces of flannel cloth, and use them as directed above.

To purify the odour of night-chairs.—Put half-a-pint of the dilute solution into the pan previous to its use, and when emptied, rinse it out with a small quantity.

To disinfect dead bodies, and purify apartments preparatory to the visits of searchers, undertakers, and jurymen, and in cases of post-mortem examination.—Wash the body occasionally with the dilute solution, which will remove all unpleasant smell, and retard putrefaction.

To prepare, and arrest the decomposition of, subjects for dissection.—Immerse the subject in the dilute solution, and let it remain about two hours; after which time it will be purified. As the dissection proceeds, the parts should be sponged over with the same; and, if they are to be preserved, the bloodvessels should also be injected with the solution.

ONE PART FLUID TO TWENTY PARTS WATER.

To disinfect cess-pools, drains, water-closets, &c.—Pour in a quantity of the solution in proportion to the capacity of the receptacle. For ordinary water-closets, one gallon of the dilute solution will generally be effectual. For large cess-pools the quantity must be increased in proportion to their contents.

To purify stables.—Sprinkle the floor, and wash all the wood-work with the dilute solution.

To sweeten musty casks, tubs, &c.—Rinse them well with the dilute solution.

To destroy canker and fungus in trees.—Apply the solution carefully with a brush to the parts affected only.

To extirpate bugs and other vermin.—Wash the floors and all the crevices with the dilute solution. The joints, &c. of the bedsteads should be moistened by a brush with a solution consisting of one part of fluid to five parts of water.

To purify bilge-water and the holds of ships.—The quantity to be used at a time is twenty gallons of the dilute solution for each hundred tons of the ship's measurement. It should be poured into the air-holes of the ship, so that it may find its way by the limber-holes into the well; and it should be thrown by a small engine into places where it may be inconvenient to introduce it by other means. A portion may also be poured down the ship's pumps, the boxes being previously removed to allow of its free passage below. The solution should be allowed to remain in the ship twenty-four

hours. At the expiration of that time the ship should be pumped as dry as possible, the well thoroughly cleansed and washed with the solution, and the operation repeated as occasion may require.

ONE PART FLUID TO SIXTY PARTS WATER.

For sponging the person in fever cases.—Use the solution either cold or of the temperature of the patient.

N.B.—When floors and other wood work are washed with the solution, the use of soap, soda, or potash should be avoided immediately before or after its application.

Brit. Amer. Jour. of Med. Science.

Foreign Extracts.

Of the Clavelisation (Inoculation for Small-pox) of Flocks of Sheep viewed as a Measure of Sanitary Police.

By O. DELAFOND.

[From the *Recueil de Médecine Vétérinaire* for January 1848.]

(*Second article, continued from page 392.*)

13. THE advantages resulting from inoculation in the case of isolated enzootic or epizootic pox are numerous and indisputable. It will be easy to point them out:—

1stly, The inoculation of flocks already attacked with the pox, whether it be in an enzootic or epizootic form, and consequently threatened with natural infection, is a measure the general advantages of which admit of no dispute. I shall, however, once more agitate the question by a reference to the public accounts made up to the present time of the mortality of small-pox.

Huard, Valois, Langlois, Guillaume, Buignot, D'Arboval, Gragnier, Girard, &c. &c., have in France made numerous inoculations on animals that have come out of flocks among whom evident symptoms of primary and secondary stages of pox have been manifest, and consequently that have been on the verge of natural infection.

1st. They have inoculated rams, ewes in lamb or giving suck, lambs from three days to ten months old, fat sheep and lean sheep, of the common French breed and of Spanish breed, both pure and impure.

2dly. French breeds from the south, north, east, and west of France.

3dly. Sheep bred and brought up in places where the disease annually prevails, but not destructively, as well as from situations where its prevalence is but accidental, though destructive when it

does come. To sum up these inoculations, extending over a period from 1805 to the present day, consigned now to the annals of science, it appears that, of 10,416 sheep inoculated, coming from flocks suffering under isolated and enzootic pox, 321 have died, and 10,095 have been saved, bringing the loss to 3 per cent.

In the case of epizootic pox, where the disease already existed in the flock, and consequently where such sheep as recovered, though they appeared healthy, might have lurking within them the contagious germ in a state of incubation, 28,533 head were inoculated, out of which number 285 died and 28,248 recovered; bringing the per centage to about 1 in 100.

These general results, then, are most favourable to inoculation. Let us now examine the results obtained throughout France.

M. Gayot assures us he has inoculated upwards of 10,000 sheep in the departments of La Marne and La Haute Marne during the prevalence of epizootic small-pox; and that, while the mortality ran as high as twenty per cent. among the subjects of the natural pox, it amounted to no more than 2 in 300, taking the average, among the inoculated sheep. Messrs. Miquel and Thomières inoculated, between the 19th of December 1820 and the 15th of January 1822, 17,044 sheep, constituting 84 flocks, of which 42 were in part infected with the natural pox at the period of inoculation; and those gentlemen made at the time the following remark, one that I have deemed worth recording:—

“Notwithstanding that the epizootic disease is already present among the flock,” say those two able veterinary practitioners, “we must not shrink from inoculating all such as maintain the aspect of health. Even though the eruption have shewn itself upon two-thirds of the flock, we may *reckon with certainty* on saving such sheep as have not yet imbibed the germ of contagion. We inoculated the flock of M. Antoine Rautier d’Adge, consisting of 300 head, of which forty already shewed the natural pox. In consequence of the remainder being inoculated, not one of them was lost.

“In another flock, consisting of 185 sheep, small-pox had seized upon two-thirds. Out of the remaining third, which were inoculated, five were lost. This mortality may appear considerable by the side of the former one. The owner of them, however, possessed no means of separating the animals in health from the sick; added to which, a hot humid wind from the south contributed not a little to aggravate the evil*.”

From 1822 to 1824, M. Guillaume, veterinary surgeon at Issoudun, practised inoculation in the departments of Indre and Cher in every season of the year. Among twenty-seven flocks, consti-

* Miquel and Thormière’s Notes on the Inoculation of Sheep-pox, pp. 6, 7, and 8.

tuting a total of 10,568 sheep, 1183 sheep (rather more than a tenth of the whole number) already had got the disease, of which number 638, or more than the half, died. Nevertheless, M. Guillaume inoculated 9443 sheep that were exposed to the contagion; and out of this number but 14 died—about 1 in 674.

To these we will add examples taken from foreigners. In Prussia, in the case, too, of epizootic sheep-pox, out of 66,716 sheep inoculated, 1674 have died, 65,042 recovered; bringing the loss to $2\frac{1}{2}$ per cent.

In Austria, in 1810, inoculation was practised upon 8000 lambs and 2000 sheep, without any loss whatever.

These researches appear to afford positive demonstration that inoculation (clavelisation), introduced into flocks already infected with the disease, in its first or second stage (*bouffée*), in situations even where the disease prevails epizootically, is an operation which, GENERALLY, is attended with no other than the happiest results. And that if, in any case, inoculation has, in sheep already contaminated, and under the influence of the fever of incubation, given rise to a malignant and fatal pox, such cases ought to be regarded as rare exceptions.

In respect to the inoculations of flocks in good health, but threatened with inevitable contagion from some vicinity, the loss is very small indeed.

From 1815 to 1819 were inoculated 16,000 sheep, of which 10,000 were lambs, belonging to the fine flocks of the Marquis of Brabançais; and the loss, at the most, did not exceed 1 per cent.

Farmer Dupreuil had his flocks inoculated, in consequence of their being threatened with small-pox contagion. 1700 ewes, three months gone in lamb, were inoculated; 21 died after taking cold. The loss here is but 1 per cent. under such very unfortunate circumstances.

The same year, rather later, the same farmer had 480 sucking lambs, and 550 lambs from six to seven months old, inoculated, making together a total of 1030; and the loss amounted to no more than 1 in 500, or thereabouts.

In general, in prophylactic inoculations, or in such as have been instituted at the moment of danger of contagion, we may reckon that, whatever be the situation, the season, the breed, the age, the condition of the female—in lamb or giving suck—the loss will not, under the most unfavourable circumstances, exceed 1 out of 200 inoculated. Now that experience has shewn the expediency of separating the inoculated sheep from those that have caught the disease naturally, in order to avoid double inoculation, a natural as well as an artificial; of airing, ventilating, in a word, purifying the habitations of the inoculated; of making use of no other virus save

that which is of a benign description, and has been deprived of its acridity (*affaibli*) by several successive transmissions, and that has been taken at a time when inflammatory phenomena have for the most part left the pustule, or, in other words, about the tenth or twelfth day from that of inoculation; of making no more than one puncture in the tail, and so endeavouring, as much as possible, to introduce but a feeble dose of the virus into the orgasm: with precautions such as these, now that it is ascertained by veterinarians that the sheep-pox virus retains its active properties for a period from fifteen to eighteen months, what ought one not to hope from well-conducted inoculations?

I believe, therefore, we are at liberty, at this day, to conclude that the inoculation of flocks of sheep already suffering from small-pox, either in a sporadic, enzootic, or epizootic and fatal form, the same as inoculation of flocks in good health, but threatened with contagion, is an operation which, up to the present time, has been followed by unquestionable success; and one which, in our day, cannot be viewed in any other light than as being highly advantageous to the conservation of our flocks, seeing it reduces their losses from 15 to 20 per cent. at least, in the case of natural pox, down to 1 or at most 2 per cent.

I ought not to omit to add, that the inoculated small-pox of our day, being a disease of a more benignant character, rarely or never is productive of those incurable infirmities or those serious consecutive maladies which happen after natural and epizootic pox; and especially ought I to remark, that such inoculations as are made with benign virus are but very rarely followed by secondary eruptions, and that, consequently, the fleece of the sheep undergoes, in general, but slight alteration, an advantage which will not fail to be highly appreciable by farmers, and by those in particular possessing flocks whose wool is precious.

15. When natural small-pox breaks out in a flock, its ordinary duration is *from three to four months*; whereas the inoculated disease in a whole flock will not occupy more time than a single attack, or *at most one month*.

16. There is no reason to doubt for a single moment that inoculation is preservative during the entire life of the animal against small-pox. A computation made by D'Arboval shews *that 7697 inoculated sheep have been either submitted to divers counter-proofs of inoculation, and that these have been variously repeated; or have been made to cohabit with sheep suffering from the natural pox, and that in no case has any disease been contracted*.

17. In the case of natural and malignant pox, the loss of a fourth or a third of the animals of the flock, although grievous enough for the farmer, is still not his entire loss. The numerous

miscarriages happening to ewes in lamb, the inevitable transmission of the disease to the lambs just dropped, and which generally die in great numbers, the stunted growth it produces and the impediments it throws in the way of fattening; lastly, the lengthened sequestration it requires in the sheep-fold during winter, and the cantonment assigned the sheep by the authorities in the summer time, make, altogether, so many circumstances occasioning loss both of money and time, as well as necessarily incurring greater or less expenditure.

The selection of proper virus, inoculation properly conducted, followed by well-ordered and punctually executed management, will, in an immense majority of cases, not to say in every case, prevent the alarming inconveniences attendant on natural pox.

18. Viewed as a measure of sanitary police, inoculation presents results of no less importance.

Put into practice on one or several isolated flocks in which the pox has already declared itself, and whose duration cannot be accounted shorter than from one to three months, inoculation cuts this short to one month, besides mitigating to a considerable degree the severity and amount of the morbid matters transmitted by the benignity with which it invests them.

Now all these important advantages are set forth in a much more striking manner when the sheep-pox happens to be enzootic or epizootic among the flocks of the canton, district, or department. In such a case as this, it sets limits to the duration of the epizootic, considerably lessens the chances of propagation, and, what is well worth noting, prevents those frightful mortalities which too often are occasioned by epizootic poxes assuming the malignant form.

Lastly, introduced into flocks in health, but threatened with contagion, in a manner unavoidable, inoculation limits to one month the duration of the pox, and thus prevents the access of a disease which, on its first attack, might destroy a large number, besides increasing the propagating elements of contagion.

Independently of all these incontestable advantages, inoculation, by transmitting the pox to the whole of the flocks of the same parish or locality, will render useless any measures of sanitary police, such as visiting, telling off, marking, separating, cantoning;—measures which I have represented as inconvenient, often insufficient to arrest contagion, and whose administration will now prove unnecessary, since in the same canton or valley all the sheep will have had the disease. And now the flocks may be driven into any pasturages, wherever they may be situate, how distant soever from the farm; following the roads they are in the habit of taking, avoiding only such high roads or public thorough-

fares as are open to strange flocks; they may likewise frequent the same watering-places, common, &c., without inconvenience. The epizootic will not last longer than the limits in a manner assigned it by man, and the sheep which have been inoculated will for ever be preserved against small-pox. And after a month or two, the farmer may dispose of his sheep in the public market without any apprehensions on the score of contagion.

Thus, conservation of flocks with their fleeces, limited duration to the disease, its mitigation, inutility of sanitary measures and regulations, economy and peace of mind to the farmers, vendibility of the animals inoculated after a month or two from their having the disease, are the precious fruits of the practice of inoculation, whether it be on flocks afflicted with the pox, or on such as are yet free from it, though from the proximity of contagion to them hardly likely to escape it. And so inoculation has met with advocates in veterinarians of high repute; among whom I may name Huzard, D'Arboval, Gragnier, Dupuy, Girard, and many farmers—Brabançais, Dupreuil, Berthier, Fessand, &c., &c.; the Society of the Pas-de-Calais in 1815; and the Minister of the Interior of the same year. Lastly, inoculation has been imperatively ordered to be put to trial by several prefectoral authorities, as I shall shew hereafter.

Clavelisation (inoculation) of flocks of sheep, then, is a measure generally received as beneficial and advantageous, be it viewed in the light of private or public interest, with regard to isolated enzootic or epizootic pox, to sheep belonging to flocks already infected, or to such as are inevitably threatened with contagion.

Nevertheless, objections have been raised against inoculation. At another time we shall examine these, and endeavour to combat them.

[To be continued.]

VETERINARY JURISPRUDENCE.

(Sittings at Nisi Prius, at Westminster, before the LORD CHIEF JUSTICE and a Special Jury.)

ANDERSON v. BLACKBURN.

THIS was an action to recover 120 guineas, the price of a horse sold by the plaintiff to the defendant. The defendant, except as to £16 odd, which he had paid into court, denied his liability.

Mr. Sergeant Byles and *Mr. Edwin James* were counsel for

the plaintiff; and *Mr. Sergeant Talfourd* and *Mr. Greenwood* represented the defendant.

The plaintiff, Mr. Joseph Anderson, carries on the business of a dealer in horses extensively in Piccadilly, as did his father before him, in the same place; and the defendant, Mr. Joseph Blackburn, is a gentleman of fortune residing at Brockley Hall, Surrey. It appeared that in the autumn of last year Lord Rancliffe, who was in court and gave evidence on the trial, sold to the plaintiff, for £100, the horse in question, which his Lordship had bred himself, and which was a very fine animal, standing nearly 16 hands high, of the Arabian breed. He was seven years old when he was sold, and, in his Lordship's judgment, was perfectly sound. Mr. Barlow, a veterinary surgeon, living at Cotgrave, in the vicinity of Bunbury; the mansion of Lord Rancliffe, had also examined the horse, and certified his soundness on his being sold to the plaintiff. The animal, from a foal, had always had a remarkably high action, both before and behind, which is peculiar to the Arabian horses; and this feature had led the defendant to suspect, after he had bought the horse, that he was subject to the disease called "stringhalt." At the time the horse was sold to the plaintiff, Lord Rancliffe was in infirm health, which induced his Lordship to part with him, believing that he should never again be able to ride him. His Lordship had ridden him down to a month or two before parting with him, and strongly repudiated, as did also his groom, the suggestion that the horse was affected with stringhalt; ascribing, on the contrary, the peculiarity which had led to that suggestion to the high action by which the Arabian breed of horses is invariably characterised. The groom, William Jones, deposed that he had known the horse ever since he was foaled, and had been in the habit of riding him; and his action he described as "a high round action, before and behind," and the same as the animal had been foaled with. He had a "catching" up of his legs resembling stringhalt, but it differed from stringhalt in this,—*that a horse subject to that disease never had it in more than one of his hinder legs at the same time*, whilst the horse in question had the peculiar catching gait in all his legs: besides, in stringhalt, horses "picked" their feet up a great deal higher than he did. Shortly after the removal of the horse to the plaintiff's stables in Piccadilly, the defendant, Mr. Blackburn, called there about the purchase of a horse. He had several shewn him, and among them the horse which had been bought of Lord Rancliffe, which he preferred to all the rest. The plaintiff's servant told him he was an expensive horse, his price being 130 guineas. The defendant offered 120 guineas, which the plaintiff demurred about taking, but eventually agreed to accept that sum: the defendant thereupon took the horse away. He

called upon the plaintiff the day after, however, and said the horse did not exactly suit him, alleging that he was "skittish" and playful, and that the lady for whom he had bought the horse could not ride him, and requested the plaintiff to take him back. This the plaintiff objected to do at first, but afterwards consented on condition that the defendant should take in lieu any other horse in the plaintiff's stables at the price which he agreed to pay for the horse in dispute. The defendant, however, would not consent to that arrangement, and, finding that he could not prevail upon the plaintiff to take back the horse, said the fact was that he had consulted Mr. Sewell, an eminent veterinary surgeon, on the horse's peculiar action, and Mr. Sewell had certified that the horse had the stringhalt. The plaintiff then said, as the defendant had taken that step, he would under no circumstances take back the horse. The defendant then took the horse to Tattersall's, where he became sadly out of condition, and was afterwards sold to a Mr. Winch, of Dulwich.

Mr. Sergeant Talfourd interposed on behalf of the defendant, who, the learned Sergeant said, had no desire to creep out of his bargain; but having been assured by Mr. Sewell, the veterinary surgeon, that the horse had the disease of stringhalt, the defendant had felt it right to resist the payment of the plaintiff's demand. Under those circumstances the defendant was ready to consent to a verdict for the plaintiff for £35.

Mr. Sergeant Byles accepted the offer. The fact was that the horse had since been sold for £100, and therefore the plaintiff had not been prejudiced to a greater extent than £35.

Verdict for the plaintiff for £35 accordingly.

THE VETERINARIAN, AUGUST 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

It will be seen, under our "Home Extracts," that the importation of contaminated sheep into this country has at last attracted the notice of both houses of Parliament, and that measures are likely to be taken—we hope, with Lord Brougham, they may not come "too late"—to prevent the spread of a disease among our flocks, which, should it once get a footing, will be but too likely to devastate them at a fearful rate. We have already got consuming disease in one of our staple articles of vegetable food—potatoes: come

to have a murrain among our sheep, to destroy our staple animal food—mutton—likewise, we shall, indeed, soon have reason to despond. Let us, then, rouse ourselves in time. Let us, if the invader have not already blown his pestilential breath amongst our flocks, without another day's delay, set about doing every thing in our power to stave off the contagion. Sheep imported in a state of actual disease, must, on no account, be permitted to be landed; or, if disembarked, must on no account be suffered to be sold, or be taken from the place of disembarkation, but then and there be put to death, and their carcasses, unfit for human food, be either forthwith burned or buried.

But, who is to determine that the sheep are diseased?—that they actually have that infectious as well as contagious and sadly fatal disease, *the small-pox*? Inspectors must be appointed for this purpose at the several seaports wherein such importations are made; and these inspectors ought to be men qualified for their duty, otherwise the dreaded malady, in some incipient or insidious form, may still escape notice, and so, after all, gain admission. *It is said* there are persons appointed as inspectors. A communication, however, has lately reached the Editor of the *Mark Lane Express*, “in which the writer complains of the *inefficiency* of the parties appointed.” Are the inspectors *veterinary surgeons*? because, if they are not professional, they most assuredly ought to be. No other description of person can be so well fitted for the office: and in an affair of such vital importance as this, surely every nerve should be strained to give efficiency to the barricade which close and clever inspection opposes to the introduction of so grave an evil.

And we wish, with all our heart, we could add, that inspection, circumspectly and scientifically conducted, were an effectual barricade. Unfortunately it is not—cannot, in fact, from the nature of things, at all times—prove so. The disease may exist in a latent—in an *incubative* form; no symptom, no external mark of it, may be detectible: the sheep may exhibit every sign of health, and yet the seeds of small-pox may be floating in its blood, ready, in due season, or on receiving any provocative, to burst forth into pimple and pustule. Hence it is, that not merely inspection of the imported sheep is called for; but, would we act on the safe side, *quarantine* as well, at least of any sheep that

might be suspected. To admit an animal with the seeds of disease in it, is as bad as, or even worse than, the admission of the animal actually diseased. Everybody would naturally be warned of the one; while the other, most unsuspectingly, would be allowed to run wild over entire flocks. But public quarantine cannot be performed without expense, and without some inconvenience too. We will not say that forty days of sequestration are required; but we should not feel satisfied with less than a third of the time—say a fortnight. And this is a measure in our eyes so advisable, that, should the Legislature not, in their wisdom, think fit to insist upon it, we should strongly recommend farmers and graziers, buyers of foreign sheep, to institute such a precautionary measure of themselves—one that they, on their own farms, would find no difficulty in putting into practice.

Supposing the small-pox actually to break out in a flock of sheep, after carefully electing the diseased from the healthy, and placing the former in such situation as the time of year and medical treatment together might render requisite, we feel no hesitation in saying that the next step should be to *inoculate* such as were in appearance still free from disease. Nay, inoculation, safe and preservative as it has long been proved to be in countries from which the pox is rarely or never absent, might be wisely carried farther than this;—might be employed, by way of prevention, on sheep living or pasturing *in the vicinity even* of contagion. An excellent paper of M. Delafond—translated from the French—in our present Number, will shew the advisability of such a measure, at the same time that it is sufficiently demonstrative of the innocency of the artificial disease to cause all comparisons drawn between it and the natural pox to preponderate immensely in favour of the former.

Mr. Arthur Cherry's severe and protracted indisposition has, for the present, necessarily suspended the business of registration. Such gentlemen as may have been expecting to hear from him on the subject will be kind enough to receive this as notice of the reason of his silence. He is now, however, we are happy to have it in our power to say, on the road of amendment, and will, we hope, ere long, be as able as ever to answer for himself.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL
COLLEGE OF VETERINARY SURGEONS.*Sitting of June 28, 1848.*

(QUARTERLY MEETING.)

Present—the PRESIDENT, the SECRETARY, Messrs. CHERRY, sen., HENDERSON, JAMES TURNER, BURLEY, PRITCHARD, ERNES, BRABY, and PERCIVALL.

THE minutes of the last Meeting having been read and confirmed,

The Secretary announced that an answer had been received to the letter addressed by the President, in accordance with the express desire of the Council, to the Commander-in-Chief; which, with the permission of the President, he would read to the Council, prefacing it with the perusal of the President's letter.

A pause of some duration ensued after the reading of these letters: at length silence was broken by

Mr. Burley, who could not understand the meaning of the reply received from the Commander-in-Chief. He felt quite surprised at the authorities treating the matter after this manner. He should have thought that it had been the object to secure for the army the very best qualified men as veterinary surgeons. If candidates were to be received who were not in possession of the diploma of the Royal Chartered College, then did the Charter become of no effect. Seeing the Principal Veterinary Surgeon of the Army present, he would appeal to him for an explanation of the dubious meaning of the letter,—“Satisfied with the existing arrangement, and did not consider it expedient to alter it.”

Other members were expressing the same desire, and all were evidently in expectation of some explanation, when

Mr. Cherry at length rose and said, had he been treated in a proper manner he had come prepared to give the required explanation: as matters stood, however, he certainly should withhold it.

Mr. Ernes conceived that the letter explained itself. The words, “Satisfied with the existing arrangement,” evidently meant that order of things which had now, by virtue of their Charter, been in force for four years; and, therefore, by saying “he did not consider it expedient to alter it,” his Grace clearly gave his sanction to the present Charter.

Mr. Jas. Turner viewed the letter in the same light. It certainly was “a great fact,” that, since the obtainment of the Charter, no

unchartered person had received a commission as veterinary surgeon in the army.

Mr. Gabriel regarded the appointment recently made by the Commissioners of Customs as analogous to what we might expect would be the rule followed in the army. They had refused to continue an individual in their employ on account of the want of a diploma from the chartered body, and had made a fresh appointment.

Mr. Pritchard would ask it of *Mr. Cherry*, as a personal favour, to disclose what he knew about the matter.

Mr. Cherry, however, remained inexorable; repeating, he should have felt happy to have afforded the required interpretation, had the request come to him in a proper manner.

Here the discussion of the subject dropped.

The second question for the deliberation of Council was, *the further liquidation of their debt.*

The Secretary, in the absence of the Treasurer (*Mr. Field*), who had been compelled on urgent business to leave town, announced that their present balance in hand, after satisfying all demands, amounted to £286..14s..0d., and that it was proposed to apply £100 of this to the further liquidation of their debt.

Carried *nem. con.*

It having been moved and seconded, that the usual annual allowance be placed at the disposal of the Secretary,

Letters were read from Messrs. Baldwin of Fakenham, Ions of Waterford, Robt. Carter of East Dereham, Leigh of Clifton, and Childe of Hackney, in answer to notifications severally addressed to them by the Secretary, of their respective elections as Vice-Presidents for the sessional year ensuing. They all expressed themselves honoured and gratified at their appointments; and *Mr. Childe* added, that, apprehending he was in arrears as a subscriber to the corporate fund, he had sent as a donation five guineas.

The Secretary stated that, in reply to the presentation he had made of the Annual Report of the Council to the Royal Agricultural Society, he had been officially informed that "the donation had been received with their best thanks."

Mr. Burley would avail himself of this occasion to remark that, in the country, he was sorry to inform the Council there existed many instances of uncertificated men being appointed by the agents of Cattle Insurance Societies, and this operated injuriously to the regular faculty. He, however, did not mean to infer that the Royal Agricultural Society had any thing whatever to do with it.

The Secretary, in the absence of *Mr. Arthur Cherry* (who was confined to his house by indisposition), was instructed, in the name

of that gentleman, to give notice of motion (which must lie dormant for three months), that By-law 3, Sect V. be repealed.

The Secretary also gave notice of a motion to alter Bye-law 4, Sect. VI.

A letter was read from Mr. Bailey, the artist by whom the excellent cast of the Centaur—the crest of the Royal College—was made, expressing a desire that the Council would patronize, or by their name sanction, the sale of the cast to certificated members of their College. It being a matter, however, with which the Council could not possibly interfere—altogether, in fact, a private affair—the Secretary was directed, in the name of the Council, to decline taking any measures relative thereto.

Messrs. Ernes and Braby informed the Council that they had recently been served with summonses from the Farriers' Company, for practising within their alleged jurisdiction. They believed so many as fifty had been served. A discussion arose as to the legality of such proceedings, or the object such Company had in view; when

Mr. Mayhew gave notice of motion—"That the Council support any member of the Royal College of Veterinary Surgeons in any legal measures that may be taken to resist such summonses."

MISCELLANEA.

EXAMINATION OF THE NASAL SECRETION IN GLANDERS IN THE HORSE.

IN the earlier stages of the disease, Professor Landerer, of Athens, records that the fluid which flows from the nostrils is without smell, or any other conspicuous property; but, as the disease advances, it becomes green or reddish-coloured, of a slimy consistence, and nauseous odour. In the former stage it is slightly acid to test paper, coagulates by boiling, with a distinct odour of acetic acid, and is precipitated in white flocks by alcohol and ether. In the latter stages it becomes alkaline, evolves ammonia when heated with slaked lime, and blackens silver instruments, owing to the presence of sulphuretted hydrogen. Accurate examination proved the fluid in the later stage to contain muriate and hydro-sulphuret of ammonia, salts of sulphuric acid, watery extractive possessing a very disagreeable odour, a rancid fatty matter containing sulphur, albumen, phosphate, and carbonate of lime.—*Medical Times*.

THE
VETERINARIAN.

VOL. XXI,
No. 249.

SEPTEMBER 1848.

Third Series,
No. 9.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

[Continued from page 425.]

RINGBONE.

THE disease we are about to treat on will be found to be another form of *exostosis*, or rather exostosis in another situation, and can only be regarded as “a disease of joint” in so far as it has connexion, direct or indirect, with any joint; though this will be found to be generally the case whenever lameness is a consequence, and sometimes where such is not perceptible.

DEFINITION.—The appellation of *ringbone* is applicable to any osseous tumour upon the pastern bone, but with the greatest propriety to that which takes on the form of a *ring* round the bone: a shape which any continuous osseous deposit is likely to assume from the circumstance of its substratum being the rotund surface of a cylinder.

THE ORDINARY SITE OF RINGBONE is the pastern bone. It is possible, however, but a rare occurrence, for it to be confined to the coronet bone. It occurs more frequently upon the hind than upon the fore leg. And mostly we find the tumour approximating the pastern joint; and where such is the case, and the deposition of callus proceeds, we perceive the tumefaction gradually creeping over this joint, involving as well the bones above and below, more or less in the disease. Sometimes the tumour occupies the middle of the pastern bone, having no immediate connexion with any joint. Rarely is it seen sufficiently high upon the pastern to disturb the fetlock-joint.

KINDS OF RINGBONE.—These various sites of exostosis have given rise to distinctions into *high ringbone* and *low ringbone*; the latter being the common or ordinary kind. Such distinctions, however, can serve little practical purpose, save in so far as, being high or low, the ossification involves the pastern or fetlock-joint in its

spread, and implicates the cavity of the joint in inflammation. It is any thing but uncommon to see the pastern joint in a state of ankylosis from ringbone; and in the different veterinary museums preparations enough will be found of the coffin joint from the spread of ossification being ankylosed as well. Any portion, however, of the exostosis which might occupy the lower half of the coronet bone would be included within *the coronary substance* (or coronary ligament), in which situation it might probably not come under the denomination of ringbone.

But, without reference to its situation, a ringbone may be *large* or *small*. There will likewise, as already has had allusion made to it, be found variations in the form of the tumour. Very often, instead of being complete, the segment of the ring is defective. There exists tumour on either side of the pastern without any perceptible prominence in the middle, between the lateral eminences. Again, the tumour may be circumscribed or isolated. All this, however, we repeat, in nowise affects our prognosis or treatment save in so far as the joint, above or below, becomes a participator in the disease.

THE HORSES ESPECIALLY DISPOSED TO RINGBONE are those that have short upright pasterns, and from their low breed are coarse and fleshy legged, the bones of such horses being more disposed to exostosis. It was a knowledge of this fact that led Gibson to make the remark, "when a fine high-bred horse happens to have a ringbone, we may conclude it to proceed from some accident rather than from any *natural* fault*," by which he appears to have meant, predisposition.

THE CAUSES OF RINGBONE may be said to be of three kinds, hereditary, structural, and incidental. Our attention was first drawn to the hereditary origin of ringbone from a remark made by an extensive dealer in horses resident in the north of England, in reply to a question put to him, how it happened that but few ringbones were now met with compared to the number that attracted notice in times past? The reply was, "Because no breeder of horses now-a-days will send a mare to a horse having ringbones." There appeared something like reason and truth in this; and we felt more inclined to attach faith to it when we came to read in Solleysell's work†, "The ringbone is sometimes *hereditary*; though it is usually occasioned by a strain taken in curvetting, bounding turns, and violent galloping or racing."

That *form*, as well as *breed*, is concerned in the production of ringbone, we have sufficient practical demonstration. A coarse or half-bred, fleshy or bony-legged horse, with short and upright

* Gibson's "New Treatise on the Diseases of Horses." 2d edit. p. 268.

† "Compleat Horseman." Hope's Translation. 2d edit. part ii, p. 122.

pasterns, is, we have observed, the ordinary subject of the disease ; and there exist satisfactory reasons why we should expect him to be so. The pastern and coffin bones constitute the nethermost parts—the pedestals—of the columns of bones composing the limbs ; and, being so, they receive the entire weight and force transmitted from above. The pastern, when long and oblique in position, receives the superincumbent weight in such an indirect line, that, bending towards the ground with the fetlock, nothing like jar or concussion follows. The very reverse of this, however, is likely to happen every time the foot of a limb, having a short and upright pastern, comes to the ground. In it, instead of the weight descending obliquely upon the sesamoids, and the fetlock bending therewith, it descends *direct*, or nearly so, upon the pastern, making this bone entirely dependent upon the bone beneath it—the coffin—for counteractive spring ; and should any thing occur to destroy or diminish this spring, or to throw more weight, or weight more suddenly upon it than it (the coffin bone) can counteract, jar of the whole apparatus ensues, and an effort of Nature to strengthen the parts, by investing them with *callus* and ossification, is likely to be the ultimate result. For, we would view ringbone, disease though it most assuredly must be called, as frequently in young horses a resource Nature seems invariably to fly to whenever their pastern bones and joints are found unequal to the exertions or efforts required of them. And the reason why ringbone occurs oftener in the hind than in the fore limb, will probably be found in the greater stress or strain the hind pasterns undergo in unbacked young horses, particularly in such acts as galloping, jumping, &c., exercises which they are likely to take of their own accord while running out at pasture.

Peculiarities of breed and form may be looked upon as *pre-disposing causes* : we have yet to seek *the exciting causes* of ringbone. These may be said to consist in any acts or efforts of speed or strength productive of concussion to the bones of the pastern. Some have ascribed the presence of ringbone to “blows.” Undoubtedly, a blow upon a bone would be very likely to produce exostosis ; but the pastern, the hind pastern in particular, is rather an unlikely part to be struck. After inflammation from any cause, even after that produced by a common blister, very often, we know, an enlargement of the pastern will be left ; and though this is not called ringbone, it may be regarded as something extremely analogous to it.

IN NATURE, ringbone is but a species of exostosis. A bony tumour, which in one situation constitutes ringbone, in another constitutes splint, in another spavin. Yet the three differ, as well in their origin and in their effects. Ringbone has an external

origin; and though it may from spreading interfere with the motion of a joint, still does it not, that we know of, produce any affection of the synovial membrane. Spavin, on the contrary, seldom confines itself to the external or ligamentary tissues, but affects the synovial surfaces as well. And splint originates in the very joint—the *fibro-cartilaginous*—which it afterwards blocks up and grows from.

Ringbone is either a *ligamentary* or a *periosteal* affection, or both. From the situation in which we commonly find it, and from the causes which are known to give rise to it, we believe it usually to be ligamentary in its beginning; though, when once formed, and given to spread, no tissue, save the tendons, escapes conversion to contribute to the osseous mass; and even the tendons themselves have been known to become partially ossified. In fact, when the exciting cause has been great, or when there exists an evident proneness in the constitution to ossific action, such is the extensive and varied form ossification takes on, that we can hardly say where it will make an end, so long as any soft tissues yet remain to be converted. Writing in the year 1823 on this subject, with 150 morbid specimens of the kind upon the table before us, we find we were led at the time to make the following remarks:—

“By far the most common seats of (ossific) disease are the pastern, coronet, and coffin bones. Out of the (said) 150 specimens there are

“5 of complete ankylosis of the fetlock joint.

“40 of complete ankylosis of the pastern joint.

“18 of complete ankylosis of the coffin joint.

“The others are either simply encrusted, more particularly around their extremities, with layers of new bone, or are variously deformed by exostoses of different shapes, many of which are very large, and several of them confined to one side. Upon one of the pastern bones a complete osseous ring is formed, the result of ossification of the theca of the flexor (*perforatus*) tendon. In nearly all, the disease appears to have taken its rise at, and to have spread from, the pastern joint; there being but few specimens in which some (osseous) accretion is not to be observed *around the lower end of the pastern bone and the upper one of the coronet bone*; which is the kind of deposition that gives rise to ringbone*.”

Here are facts which not only demonstrate the more common site of ringbone, but reflect a good amount of light upon its origin and nature and tendency as well. While the *nidus* of ringbone appears to be the ends of the two bones concurring to form the pastern joint, there exists a manifest disposition in parts adjacent to take on similar

* “Elementary Lectures on the Veterinary Art,” vol. i, pp. 335-6.

morbid action. Jar or concussion would, as we have endeavoured to shew, be likely to affect this joint, and, in case such amounted to injury, would excite inflammatory action, and this would be followed by ossification. The same result, viz. ossification, would be likely to ensue even though *weakness* only was experienced in the joint; Nature, as we have observed on another occasion, consolidating the parts to increase their strength. And, as many of these specimens indicate, to such an extent is this ossification sometimes carried, that pastern, coronet, and foot, are involved in one deformed porous mass of ossification.

LAMENESS IS NOT AN ORDINARY CONSEQUENCE OF RINGBONE. Whether the tumour be productive of lameness or not will depend,—First, upon the presence of inflammatory action in it; Secondly, upon any tension it may create in the periosteum covering it; Thirdly, upon its proximity to a joint and consequent impediment it may offer to the motions thereof. In general, in young horses, ringbone forms so gradually and imperceptibly, that it is accompanied neither by inflammation nor by tension. It may, however, and frequently does in the course of time, so increase and spread that the joint gets cramped and confined in its action, and ultimately becomes a fixture; and the consequence is, lameness, or some approach thereto, such as is familiarly known under the appellation of “stiffness.”

The pastern and coronet bones—the two first phalanges of the foot—are, though of different magnitudes, so similar in form and use, that anybody looking casually at them might suppose that one continuous bone would have answered the purpose of the two; and so to a certain extent, perhaps, it might; but not to the extent to have afforded that flexibility and play which the pastern as it is possesses, and which is more particularly exhibited in oblique-pasterned horses at such times as they are observed cantering, or galloping, or curvetting upon their haunches. Then it is especially that the pastern joint is brought into action, and that a horse without such a joint, or with one in a stiff state from ringbone or other cause, would be found to fail. Not only, however, in such acts as these, but even in ordinary going, is the pastern joint of use, and will there be a difference in action when such is rendered immoveable; though that difference may not be detectible by the eye of the common observer, or may not, in his judgment, amount to any thing beyond “stiffness.”

It is said, that sometimes lameness from ringbone becomes observable *antecedently* to the appearance of the tumour. Mr. Spooner (of Southampton), in his work “On the Foot and Leg of the Horse,” informs us—“It often happens that a horse is

lame, and it is somewhat difficult to discover the seat of lameness; but after awhile a ringbone forms." We are at a loss at the moment to recall to mind a case where such has occurred in our own practice: at the same time we have no right to question a fact which bears a strong analogy to what we ourselves have stated happens not so very infrequently in spavin, and we may add, we believe, in splint as well.

The *magnitude* of a ringbone is not likely to influence any lameness that may attend it, save in so far as the tumour may occasion tension of the periosteum, or may abut against or spread upon any contiguous joint. This latter was Solleysell's view of the matter, and observation has shewn it to be a correct one. "The longer the ringbone continues," says this observant writer, "it descends lower upon the coronet (pastern?), and, increasing to a considerable bigness, makes the horse lame; from whence 'tis plain that *the greatness of the danger that attends it must be measured by the nearness to the coronet*."

Generally speaking, actual or palpable lameness is not an accompaniment of ringbone: but there occur few cases in which stiffness, to a greater or less degree, of the pastern joint is not perceptibly present; though, as we have had occasion before to remark, this "stiffness" is not commonly noticed, or, if noticed at first, by use wears off to that degree that, being in a hind leg, after a time it is not by the ordinary rider felt or observed at all. In chronic cases of ringbone and other exostoses, in cases in which all inflammatory or hypertrophic action has passed away, it is surprising, after medical treatment has done its best, what use, when it is not carried to abuse, brings about for such horses, by way of creating motion in joints before partially or completely stiff from ankylosis, and particularly such as has not been of too long standing.

THE TREATMENT OF RINGBONE, being by modern practitioners of veterinary medicine reduced to the principles laid down for the treatment of exostosis in general, has in their hands not only become divested of that cruel and useless practice, "drawing the sole," as recommended by Solleysell and others, but has undergone some improvement as well. It will occur to any veterinarian setting about to treat a case of the kind, that the object with which treatment is instituted should be the paramount one in his mind; seeing that he will meet with many cases of ringbone that call for no medical treatment at all. If lameness be present, we must inquire wherefrom the lameness proceeds, whether from any existing in-

flammation, or from over-stretched periosteum, or from proximity of the exostosis to, and consequent interference with, any joint or sinew; all which considerations may, in kind or degree, modify his plan of treatment.

For the relief of periosteal or ligamentary inflammation, engendering callus, or for recent osseous effusion, nothing surpasses the local abstraction of blood, succeeded by a blister upon the part. Any vein of the limb—the principal one is generally to be preferred, either the *femoral* or the *plat vein*—may be opened, and at the same time a brisk cathartic may be given; and as soon as that has worked off, a blister may be applied to the ringboned pastern; the part being first well heated, and particularly in cold weather, by previous soaking in hot water, or by a spongio-piline poultice.

When, however, the case, instead of being a recent is a chronic one, one consisting in hard and solid exostosis, and from which most, if not all, superficial at least, inflammatory action seems to have disappeared, it would be folly to expect that any remedies of an antiphlogistic character could do any good. The lameness here may arise from some deep-seated morbid action, probably in the vicinity of the pastern joint; and in such a case nothing is likely to be of so much service as potent counter-irritants in the shape of strong blistering, and sometimes in that of firing. Irritating applications to the skin, such as ol. thymi, antimony ointment, &c., are found little beneficial; and such as have a tendency to stimulate the absorbents into action, the iodine and mercurial ointments, are hardly applicable in a case like this. They may, when the horse is in a state to continue his work, be used to promote absorption of any remaining tumour; they will exert, however, but trifling power in the cure of lameness. Solleysell made the remark, that on colts and young horses ringbones “insensibly wear off of themselves* ;” and he might have added, that not only ringbones, but spavins and splints, and other exostoses, as horses advance in years, likewise “wear off.” Independently, however, of the influence of age on such like enlargements, it is, we would repeat, truly astonishing what good effect work, or forced use of the diseased joints, has on them; in proof whereof we might instance the many ringboned and spavined horses every-day’s observation brings to our notice working in the streets of London and other populous towns; and it is incredible what labour such stiff-jointed or partially stiff-jointed horses are able to perform so long as the *cavities* of their joints remain uninvaded by disease.

PERIOSTEOTOMY.—Professor Sewell, whose highly commend-

* Op. cit. vol. ii, p. 269.

able philanthropy has led him on all possible occasions to be the warm advocate of this operation, recommends its adoption in ring-bone, with the reservation that the tumour has no connexion with the *joints* or *ligaments* in the vicinity: then, says the Professor, may "the periosteotomy knife be employed with safety and success*." We should fear this limitation would very much restrict its applicability.

OBSERVATIONS ON THE ACTION OF ETHER AND CHLOROFORM ON ANIMALS.

By EDW. MAYHEW, *M.R.C.V.S., Spring-street, Paddington.*

WHEN the use of ether as a means of producing insensibility during surgical operations was first announced, I presumed to state my opinion that to our patients the discovery would prove to be of no advantage. Experience seems to have justified that opinion; but no one appears to have investigated the action of an agent that has been shewn to possess such great and peculiar power. It is not my intention to assert that I understand all its properties, or am acquainted with all the benefits which it can confer, but it is my desire to direct attention to some of those virtues which to me it seems to possess. I have used it as largely as my practice enabled me to employ it; and the result has been, that day by day I have become more pleased with its effects, and more confident in the results which I expect it to induce. Over every other agent with which I am acquainted, it seems to be gifted with one particular advantage. Potent as it is in its operation, in an equal or even in a greater degree, it is safe. I have given it in doses far beyond those which are commonly administered, but in no instance have I had occasion to repent the bold course of treatment which I adopted. It is among the very few things in the pharmacy which has not often caused me to doubt, and has never given me reason for regret.

When speaking thus in praise of ether, I allude to its operation as a medicine when given either by the mouth, or as an enema, in both of which ways it has for some months been my habit to administer it. There are, however, many records that would justify its being regarded in a very different light to that in which I am disposed to view it. Authors speak of it as a poison, but as such

* In the discussion *FIRING v. SETONING*, *VETERINARIAN* for 1837, p. 173.

I at all events do not know it. That it can be so used as to destroy life, of course, is evident; but when properly guarded, I have no proof that its employment is attended with even the remotest danger. The idea that it is not free from hazard appears to be chiefly drawn from certain results obtained from those filthy practices which the gentlemen of science are pleased to term "experiments." We are told that Orfila determined the effects of ether upon dogs, and "found that half an ounce introduced into the stomach, and the œsophagus tied, caused attempts to vomit, diminished muscular power, producing insensibility and death in three hours." Not having the original work (*Toxicolog. Generale*) by me, I extract the above from Pereira's "Materia Medica," 2d edition, 1842; but while doing so, I cannot refrain from adding, that the inference to which the sentence leads is wholly and entirely unfounded. To the pup of a lady's spaniel I have given more than half an ounce in the time stated, and life has been preserved; but when doing so, I did not tie the œsophagus, or introduce the fluid in a state of purity into the stomach. Whatever may be Orfila's statement, I positively deny that death was the necessary consequence of the medicine; and as firmly assert, that to any dog, in three hours, I could with no evil consequence administer the quantity of ether which the French author assumes he has demonstrated to be poisonous. In medicine, the more important question is, not whether an agent can be made to kill, but whether if, when given with the intent to cure, it is likely to destroy. Ether, when dissolved in water, is no longer dangerous; diluted to some extent it is rendered harmless. That which I obtain is readily soluble in ten times its volume of water, or, if combined with the tincture of opium, in a smaller quantity of the same fluid. To small dogs I have repeatedly given two drachms of ether and a scruple of the tincture of opium at a single dose with the best effects, and into the rectum of these animals I commonly throw a drachm of ether in solution every hour or half hour, as the symptoms, in my judgment, are urgent; and I am not aware that any evil has resulted from this practice. To the horse I have administered six ounces of ether, combined with four ounces of the tincture of opium, at a single draught, and have, at the expiration of an hour, repeated the drink, and never knew the animal to be otherwise than relieved. Sometimes I have, immediately after giving the drink, administered two ounces of ether in an enema; so that no less a quantity than half a pound of this reputed poison was acting upon the system, and nevertheless the horse has for the time been eased, and has ultimately recovered.

Writing however in general time, it is not my purpose to recommend the employment of ether in the doses I have named. I

mention them only to shew that the agent is comparatively innocent in its action, and not productive of those consequences which have been attributed to it. For ordinary occasions, from two to four ounces will answer every intention so far as the horse is concerned, and from half a scruple to half a drachm will be sufficient for the dog.

Let me now speak of its action, so far as my limited opportunities have enabled me to comprehend it. It is said to be in its operation analogous to alcohol. This assertion is certainly incorrect. A moderate quantity of wine or spirit is, in my own case, followed by headache and nausea on the subsequent day to the indulgence. The inhalation of ethereal vapour produced no such effect. Alcohol notoriously quickens the pulse; but on animals I have found ether to either leave the heart's action unchanged or to improve its character, frequently diminishing the number of pulsations. Alcohol, according to every observation—and certainly nothing admitted into the Pharmacopœia has been so largely tested—tends to increase inflammation; whereas, if my senses do not deceive me, no substance is endued with such decided and such speedy antiphlogistic properties as ether. It is for these last that I principally employ it. In gastritis, gastro-enteritis, enteritis, diarrhœa, and dysentery, in all their complications and in all their various stages, I have used it, and if not with ultimate success, yet always with such results that the post-mortem caused me no self-reproach. Over the urinary organs I have found ether to possess a marked control. During calculus in the bladder of a dog I gave it, and so decided was its operation, that, after taking but a small quantity, the animal was so much relieved that the owner reported it to be "quite cured." In a case of constringency of the neck of the bladder of a horse, in which the symptoms were so violent that they were supposed to proceed from stomach staggers, relief was obtained. In fits I have found ether act almost as a charm; and its operation has been equally effective if administered as a clyster, when its exhibition by the mouth would have been attended with danger. In short, though I generally combine ether with such other agents as in my judgment are suited to the symptoms presented, I am induced to consider it as applicable to every case of abdominal disease. Of course, you will regard this opinion only as the conjecture of a man who confesses his means of arriving at certainty to have been imperfect; but I state it in sincerity as my conviction at the present moment, and, while doing so, I ask the members of my profession to test how far it can be substantiated. It is my wish to have the properties of that which I am disposed to look upon as one of the most speedy and most active alleviators of suffering put to an ample trial, that, if it does possess those qua-

lities I believe it is endowed with, its benefits may be extended and its value recognised. That it has by some been over-estimated there can be no doubt. It has been used to destroy the tape-worm; but I cannot imagine it is in such cases of any benefit. To a dog that died I gave it largely for several days. The animal must have consumed at least more than half a pint of ether; but on opening it after death I discovered the ileum full of tape-worms, all of which were alive. It has also been employed as a substitute for alcohol during the last stages of fever; but, so far as my experience extends, its stimulative properties are not such as would warrant its being depended upon where the system was exhausted.

Where there exists inflammation, either acute or chronic, of the abdominal viscera, when spasm is present, or when congestion either of the lungs or brain is established, ether, in my opinion, is of service. Wherever the pain is the predominant symptom, I have found it of the highest value, and know of nothing which is worthy to be compared with it. It seems to act by producing a certain degree of insensibility not amounting to unconsciousness, and thus permitting nature to struggle singly with the disease, without being at the same time exhausted by suffering the agony of the disorder. The relief which ether secures (and where not contra-indicated that relief is made more certain by combining it with opium) appears to allow other drugs a better opportunity of acting upon the original affection. The body reposes, and recovers from the irritability which anguish naturally induces, and which in its effects becomes no less dangerous to life than the disease itself. I always give it with the view of diminishing the pain, and I follow up dose after dose until the desired effect is obtained; after that I lessen the amount, using only such quantities as I think are required to keep up its action. While doing this, however, I seldom entirely rely upon it, but employ simultaneously those drugs which in my judgment are suited to the disorder. The advantage thereby secured is not small. The system is quieted; the strength is husbanded; the animal enjoys a comparative rest, and Nature gains time to recruit her energies. If injury ever results from this method of employing ether, it is occasioned through a false reliance being placed upon its stimulating qualities. My own belief is, that it possesses no property of that kind. So far as I may be qualified to speak, it is a potent sedative, acting immediately on the sympathetic system, and thereby indirectly affecting the other parts. Thus, congestion I view not as the consequence of a want of vitality, but as the excess of it, which constricts the capillaries. We do not meet with congestion save under circumstances which would warrant such a view. When consequent upon external injury, as in the instance of a bruise, the pain shews that the

vitality is in the part increased. When in the lungs, the increased action of the heart and breath demonstrate that the vital principle is labouring under a morbid influence which amounts to positive irritability. When in the brain, it is preceded by unnatural sensibility, and only in its after consequence is disguised by its effect on the sensorium. The ether, by acting as a sedative on the sympathetic system, I imagine, relaxes the capillaries, and thereby allows them to disgorge the excess of blood with which they are clogged. It is in this manner, I suppose, it produces its antiphlogistic effect. During inflammation, congestion always is present; and by subduing that, the inflammation is also conquered. But, beyond this, I conjecture it has a further power; for by its sedative influence over the sympathetic nerves, it checks that tendency to an abnormal secretion which is the attendant and most fatal consequence upon inflammation.

My observations upon the effects of ether have led to the opinion that there are in existence a class of medicines which have been too much neglected and too little studied. Among this class is also chloroform, which I am not aware has been administered internally. In a recent case, however, when the symptoms appeared desperate, I ventured to employ it; and if further trials corroborate the result I then obtained, there can be no doubt chloroform will ultimately take an important place in the Pharmacopœia.

For the information of my professional brethren, I am tempted to make the history of that case known. I do so because, in private practice, it frequently happens that a considerable period elapses before the opportunities which a hospital commands are met with. Sometimes case after case of a similar description follow in rapid succession; but on other occasions months may pass before the practitioner may be called upon to treat the most ordinary affection. There can be no certainty in this respect, and therefore I am induced to invite the members of our College to try the agent from which I have every reason to conclude the greatest advantage was secured.

On the evening of July 21st I was summoned in haste to see a horse, the property of a gentleman who resides in my neighbourhood. The animal was in good condition, and in constant work. I found him in a loose box, surrounded by several persons anxiously watching him. The breathing was short and rapid to an unusual degree. As the symptoms were urgent, I made no attempt to count it, but I should say it could not be less than a hundred in the minute. The whole frame was convulsed; there did not appear to be a muscle in the body which was not violently quivering. A little dung had been passed, and it was coated with mucus. The ears and extremities were warm—the mouth hot and harsh—the

nasal membrane dry and pallid—the conjunctiva injected—the abdomen tympanitic—the tail erect and quivering—the head pendulous, save when it was thrust out to curl the upper lip or slowly moved round towards the side. The horse was in evident pain; but, if made to move, it had an inclination to walk round and round, and always to the right. Pressure to the abdomen drew forth no sign of tenderness, but seemed rather to annoy the animal. There was no pulse at the jaw, and the heart was indistinct. The beating of the temporal artery, however, could be plainly felt, and numbered 65 in the minute, but was of a thin and feeble character.

There was but little history to be obtained. The horse had been ailing during the day, and had taken a fever drink. He had been observed to “blow,” at least an hour before I saw him. The cause could not be conjectured, and nothing was stated to account for the symptoms, except that a groom had given the animal a handful of beans in the morning.

There was evidently no time to be lost. The breathing alone, if not relieved, would speedily produce consequences such as no medicine could be expected to counteract. As to the nature of the complaint I could form no opinion, save that it was not yet absolutely inflammatory, and was seated in the abdomen. Before administering any thing I back-raked the horse: the sphincter offered considerable resistance to the passage of the hand, but the rectum was empty, though moist with its secretion, and more than usually warm.

The following drench was given:—Sulphuric ether, six ounces; tincture of opium, four ounces; water, three pints; and before the animal had swallowed the whole of it an obvious change was to be observed. The convulsive shivering in a great measure subsided, and the muscles only in places could be felt to tremble when the hand was placed upon the body. The breathing became more easy, and the expression of the horse's face less painful: without pause, however, I threw up a clyster composed of two ounces of ether and two ounces of tincture of opium in a pint of water, which was almost immediately returned, and with it some flatus was also discharged.

For half an hour I remained to watch my patient, and though during that time he continued to improve, yet he exhibited some of those effects consequent upon the medicine, which, in persons unacquainted with the operation of ether, might, perhaps, create alarm. Saliva, in no inconsiderable quantity, flowed from the mouth, and for a quarter of an hour hiccup was well marked. I was not sorry to see these symptoms, for they generally are

present when the benefit is most speedy. At the end of the half hour the horse was so much better that I left him, and saw him again about half-past eleven at night, when I found the animal comparatively quiet, but still evidently suffering pain. Four ounces each of ether and tincture of opium, with half an ounce of the tincture of aconite, was given as a drink, and a tobacco smoke enema administered, and the symptoms after this gradually diminished. The horse became more composed, and the nasal membrane moist, and the animal was obviously disposed to sleep. As the tympanitis, however, remained, I ordered some men to kneed the right side of the abdomen, and kept them thus employed for half an hour, at the expiration of which period there was a partial perspiration. The upper lip was no longer curled. There was no turning of the head toward the flank, and the danger seemed to be passed.

At two o'clock in the morning I considered the case all but well, and gave a drink composed of solution of aloes, seven ounces; spirit of nitric ether, four ounces; tincture of opium, two ounces; tincture of aconite, half an ounce; and tincture of ginger, an ounce.

Some of my professional brethren may think I was tardy in resorting to the use of aloes, but, for reasons which are obvious, I object to their employment during the existence of acute symptoms which are indicative of colic in any of its multifarious forms. I now left a man to sit up with the horse, giving order that if any change, however slight, took place, I should be immediately called. At five o'clock I was summoned, the messenger saying "the horse was taken suddenly worse, and would die." I found all the old symptoms had returned, but in an aggravated form. The ears and extremities were cold; the nasal membrane of a leaden hue; the eye haggard; the breathing, if possible, even quicker than on the first occasion. My hopes now grew small, and I feared that the case would end in death. Knowing that the most powerful agents after some time lose their effect upon the system, I was less confident in the operation of ether, which hitherto had done me such good service. I determined to try the effect of chloroform, and, combining six drachms by measure with half a pint of olive oil in which two drachms of camphor had been rubbed down, I gave it to the horse, also repeating the tobacco smoke enema. The effect was almost immediate, and none of those symptoms which ether induces were observed. At the expiration of an hour I saw no necessity for doing any thing more, nor did I, in the course of the morning, find occasion to administer any thing further. Towards noon the horse was looking out of box and watch-

ing the grooms in the yard. He would have eaten, but I ordered food to be withheld, and he is now perfectly restored, never having had a relapse.

Further inquiry leads me to believe that the symptoms I have described sprang from over-feeding, as the proprietor put no check upon the provender, which was open for all the grooms, and the horse was a general favourite with the men about the stable. It was one of those cases in which the early symptoms of stomach staggers are mixed up with colic, and the diagnosis, when no history can be obtained, is then particularly difficult, especially as the indications are, in every instance of this kind, so modified as to be absolutely confused. I acknowledge that, in the first instance, I could not make up my mind as to the nature of the affection. Clearly it was not enteritis; and though the slimy feces seemed to denote the peritoneum was involved, nevertheless the absence of a pulse and the freedom from pain on pressure contradicted the idea. There was no sign of inflammation, and the suddenness of the attack did not allow me to conjecture that the distress was consequent upon any thing that could be called exhaustion. The most marked symptoms indicated congestion and deep-seated abdominal pain, or what is generally classed under the head of colic. I knew not what I had to combat. I only saw the necessity there was for active measures, and I was not certain that any treatment could afford the relief which, if not quickly obtained, would be of little service; therefore it was I resorted to those large doses that have been mentioned, and in every instance I obtained an effect which equally surprised and pleased me.

The medicine certainly was not thrown away, for hardly was it swallowed before its operation was perceived. Still some will laugh at the narration of this case, and many will object to adopt the course which it recommends. It will be urged that the stable has fixed the price of the drench, and the practitioner will not be allowed to exceed it. No charge which will be sanctioned can remunerate the man who employs the doses I have stated, for no chemist would prepare the drinks at the sum which the horse-owner has been taught by custom to regard as settled. I acknowledge the full force of these objections; but at the same time I cannot forbear observing, that nothing pays the practitioner so badly as a fatal case. For my own part, I cannot think of the druggist's bill when there is danger in the stable; and I am happy in my conviction that, with the majority of our profession, this feeling or weakness is shared. We often lose money as well as rest, and congratulate ourselves if, in the end, we escape reproach: so it is in many cases, but not in every instance, and in practice we must

be content to take the good and bad together, making one balance against the other.

However, putting expense out of the question, the result then becomes the only consideration, and this give no cause for complaint. That ether has no inflammatory action I am certain; that its operation is not of that order which is generally attributed to stimulants, I may from repeated proofs confidently assert. In veterinary practice it seems to supply a void which has long been felt. The symptoms which characterize colic too frequently are no more than the commencement of enteritis, &c.; and it is with me a doubt if any portion of the digestive canal can be inflamed without colic being present, particularly during the early stages. To obtain some therapeutic which should relieve the spasm without the hazard of aggravating the disorder that too probably may succeed, was therefore much to be desired, and for this purpose various combinations have been proposed. Against the great majority of these, however, it may be advanced, that in proportion as they were safe, so also were they uncertain; either too mild to touch the disorder, or too slow in their operation to cut short its progress. Not one of them, perhaps, is such as will, in any degree, affect the disease, which at the time, we fear, is concealed behind the more violent symptom. Such, however, is ether, which in enteritis, &c. I would unhesitatingly administer, and from its employment expect only the best results: indeed, upon it I would chiefly rest my hopes of success. The speed with which it acts is also not to be overlooked, for often in less than twelve hours has colic terminated fatally in enteritis. The most immediate antispasmodic, ether is also, in my conviction, the most powerful of antiphlogistics. For the present you must accept my assertion of this fact; but I invite my profession to put it to the test. How far it may hereafter be superseded by chloroform, I cannot say; but if the result gained in a single instance be corroborated by future trials, probably chloroform will become one of the most valued agents in the pharmacopœia. Mixed with olive oil, it makes a pungent but at the same time a pleasant drink, and one to which a child would hardly object. As an antispasmodic for infants, I can imagine it would be of the highest utility; and in the fits to which children are liable, I can suppose that ether might be found to be invaluable. The dose, of course, it is not my province to suggest; but in such cases upon dogs, pups being very subject to disorders that are analogous to those affecting the young of the higher animal, I have proved it to be of the greatest benefit. In such cases I employ it as enema; but for the human being it would require to be much more diluted, as, in man, experiments made

upon myself have informed me that the rectum is much more sensitive, though, if it would be so during spasm or cerebral congestion, I am unable to say. What amount of ether given in the manner I have mentioned would be dangerous, I do not know. Against those experiments which gratify a morbid curiosity, and aim only at recording the ease with which life can be destroyed, I am on principle opposed: I never practised them, and never mean to join those who do so. I have read the works of Orfila and Magendie, but from their cruelties I have gained no knowledge. I believe we grow wise as we endeavour to cultivate our better feelings, and learn more by trying to save than by seeking to kill. It was with the desire to alleviate pain that I first was induced to resort to ether; the same wish led me to try chloroform, and in both cases I have been rewarded. In all painful diseases of the abdomen these agents appear to me admirable. Lately, it has been announced that naphtha is in the Asiatic cholera almost a specific; but, reasoning from the effects I have witnessed, I should imagine ether would be far more applicable to the disease, and probably chloroform even better still. For my own part, were I attacked by that disorder, I should entreat that I might be made the subject of the experiment. To allay the agony would be my strongest wish, but I should also be instigated to make the request by the conviction that the medicine would subdue the affection.

Every medical man is aware how much is gained when the pain is lessened, and of the power of ether or chloroform to induce insensibility there is no longer any dispute. They have, however, been resorted to to overcome the suffering which is consequent upon surgical operation, and in the manner of their use, if not positively dangerous, are certainly not absolutely safe. The anguish attendant upon disease is so great, that the suffering consequent upon the most severe and tedious operation bears to it no comparison. To allay the torture which may endure for years, and cease only with life, should be no less an object of the physician, than to render his patient unconscious to the knife is a glory to the surgeon. Hitherto alcohol and opium, singly or in combination, have been for this end generally employed; but so objectionable has their use been found to be, that often the medical attendant fears to administer them. The relief which they procure is too frequently dearly purchased by the consequences which they induce; and it is often more prudent to allow the patient to suffer, than to obtain for him the temporary ease that they, in most instances, command. But to the class of medicines I am treating of I do not know that similar objections can be advanced: I am not convinced that, after they have been largely taken, any evil is

witnessed. The animals appeared to require no after treatment beyond such as the disease demanded. I have resorted to no means to remove any symptom consequent upon the effects of the narcotic simply, because I could not discover that any such remained. The dogs and horses appeared to awake, as it were, from a troubled sleep; or they recovered from a painful disease almost immediately, and in a few minutes regained their natural spirits. No sign of lassitude, no appearance of stupor or headache, could be observed; but frequently the shriek of the dog has been cut short, or the fit has been suddenly arrested.

There is obviously a class of medicines for which we have no appropriate name, and with which we are only imperfectly acquainted: to this class, no doubt, numerous additions will be discovered. Their operation will be most shewn in the power they possess of subduing pain, and probably the influence they have over disease will hereafter be found to be consequent upon this their principal effect. In abdominal disorders, those which are accompanied with the highest anguish, ether and chloroform appear to me to deserve further investigation. I am anxious only to direct the attention of the medical profession to the results which for the last year I have carefully watched, and which, repeatedly obtained, have left upon my mind a conviction so strong, that I feel myself in duty bound to make it known.

August 5, 1848.

RETENTION OF THE FŒTUS IN A COW—BAND OR LIGAMENT ACROSS THE VAGINA AT THE MOUTH OF THE OS UTERI—AND PLEURO-PNEUMONIA.

By Mr. W. A. CARTWRIGHT, M.R.C.V.S., Whitchurch, Salop.

March 31, 1848.—I WAS called in to attend a cow belonging to Mr. — that was not well. He informed me she ought to have calved some months ago; that she now “fared” of calving, or had the udder enlarged at that time; that latterly she had been voiding, every now and then, a quantity of purulent matter from the vagina. On “touching” her for the calf, one could feel some tumour, but it was evidently small and lifeless. I passed my hand up the rectum, but I could not feel any thing like a live calf any where near, though, on forcing my arm up as far as possible, I could feel some tumour; I could not, however, distinguish any thing like limbs. I next passed my hand up the vagina to ascertain whether there was any dilatation of the os uteri, but I could not detect the

least. I might have forced my finger into it. While examining the os uteri, I was surprised to find there was a ligamentous band, extending from the upper to the lower side of the vagina, of the thickness of a penny cord, nearly close to the os uteri. It was quite firm in its texture, and, on pulling at it, I drew the vagina back, and the band in sight, so that the by-standers could see it. I had it divided. She was at the time affected with pleuro-pneumonia, and on the 4th April she was slaughtered.

Examination.—The right side of the lungs was hepatized. The uterus was about the size of a peck measure. It contained a quantity of reddish-coloured matter, bones, and putrid flesh. The matter lay, in a great measure, in the posterior parts of the horns. The posterior parts of the fœtus were completely denuded of flesh, and lay floating in the matter. The ribs were also bare. The contents of the abdomen and thorax were not converted entirely into matter. The head and neck were the least denuded of flesh. The fœtus could not have been more than five or six months old. The back of the neck lay against the os uteri, which was perfectly sound and contracted. The internal surface of the uterus varied in colour, and in many places it looked as if it had been torn or bruised; but, taking every thing into consideration, it was remarkably healthy, when we consider what pressure it must have received, and also from lying in contact with so much purulent matter. The contents were not at all offensive in smell. The vagina was next laid open, which was sound. The band or ligament, that I before spoke of, took its rise from folds of apparently glandular substances of the vagina near to the os uteri, and was inserted into the opposite side of the vagina. It was of the thickness of a penny cord, of a fibrous texture, whitish colour, and about three inches long.

Observations.—I think there can be no doubt but that this cow must have been for “picking” her calf when it was five or six months old, and that she was not enabled to do so from this band or ligament stretching across the vagina at the mouth of the os uteri. It would actually have the power of preventing the os uteri from dilating, by keeping the vagina from opening, even when pressure was applied within the os uteri. I never met with a case like it before in the cow, but have seen a similar one in the sow. There were no abscesses in the texture of the uterus from absorption of matter. It is evident from this case that a large quantity of soft matter may remain within the uterus for a length of time without being expelled, and it seems that, from the natural contraction or closure of the os uteri, it must be very difficult for it to escape. A dilatation of the os uteri and great contraction of the uterus must take place ere it can escape. It can never naturally

flow out, since the uterus, from its weight, lies low down in the abdomen, below the level of the os uteri. Up to the time that she was taken ill of pleuro-pneumonia she was in good health and condition, and never hardly was seen to strain of any importance. Sometimes there was matter seen to be voided from the vagina.

FALSE LABOUR PAINS IN A HEIFER.

By the same.

ON March 31, 1848, Mr. — sent for me to see a two-year-old heifer that was straining very much, as if she wanted to calve. She had been doing so for twelve hours.

Symptoms.—She is thin. Has a little udder, but which is evidently filling with milk. Is not the least “off at the hips.” Strains *violently*, and forces the rectum out for several inches. I examined her *per vaginam*, to see if the os uteri was at all dilated, but found it was not in the least so. Under these circumstances I considered it prudent not to interfere with her to attempt the dilatation of the os uteri, in order to remove the calf, but, on the contrary, thought it advisable to give some sedative medicine to allay the spasm and irritation. Accordingly, I gave a drachm of powdered opium, boiled for a short time in some gruel, and left another dose to be given in the night, if the straining did not cease. The medicine had its desired effect, and consequently the other dose was not given.

April 1st, 9 A.M.—She had been straining a little this morning, but, it being of no moment, the other dose was not given. She was now not straining in the least; was more “off at the hips,” and the udder fuller. To be left alone. I told them I thought she would calve in twenty-four hours, and at night she did so, without any untoward results, requiring no more than a little manual assistance to draw the calf away.

EXTRACTION OF TWO LAMBS, TWO HEADS PRESENTING.

By the same.

April 2d, 1848.—THIS night an aged ewe of ——— was seen yeaning. The head was soon out, but it would not pass any further; and I in consequence was sent for. When I arrived, I found her down, while the head of a lamb was fully out of the vagina. No legs appeared. On introducing my fingers, I could feel the head

of another lamb within the pelvis. As the ewe was aged and roomy, I was enabled to get my hand into the vagina by the side of the protruded lamb's neck, by which means I came in contact with the head of the other lamb, which I forced out of the pelvis into the body of the uterus. Having done this, I laid hold of one of the fore legs, and drew it out; and then I pulled at the body and this leg, and extracted the lamb easily, although the other leg lay behind. I next felt for the other lamb; but here the head only presented. I again got one of the fore legs out, and then removed this lamb in the same manner as the last. The first lamb was a very large one—the other was smaller. She did well, and both lambs lived. It is astonishing how lambs will rally and recover, although apparently next thing to dead.

EXTRACTION OF A DEAD LAMB WITH NELSON'S FORCEPS.

By the same.

A EWE, the property of ———, has been seen to be uneasy for two or three days past; and this day, 12th March, 1848, I was called in to attend on her. She was very uneasy, and occasionally was straining; udder not at all distended as for yeaining. The vulva is but slightly relaxed, and the os uteri will not admit above one finger at once. On passing the finger through the os uteri, I could distinctly feel the back of the head and portions of the flat bones of the skull. By perseverance I dilated the parts a little, and was enabled, through the use of Nelson's forceps, to lay hold of some of the bones of the skull and neck, and so remove them. Having done so, I drew out portions of the skin of the neck, to which we fastened string to pull with; by means of which, and the forceps together, we got the neck into the passage, and by patience and perseverance drew the head out doubled upon the neck. I then removed the head, and as much of the bones of the neck as I could, and securely fastened a cord round the skin of the neck, and then pushed all into the uterus. I now made search for the legs, and soon found one doubled up at the knee. I got my finger at the back of the knee, and drew the leg out thus doubled; after which I skinned it, and tore the limb away. The other was got up, and removed in a similar way. We then laid hold of the neck, to which a string had been attached, and drew the chest out as far as we could; but we found we could not get it completely out without removing some of the ribs as well as the contents of the thorax. By doing so, we removed the remainder of the foetus without much difficulty, and the ewe did well.

THE CATTLE EPIDEMIC.

To the Members of the Royal Agricultural Society.

My Lords and Gentlemen,—THE epidemic that occasionally makes such havock in this country was, from what I have been able to learn, sent us from foreign parts,—Holland for instance, which is a marshy country. We are told it is flooded in winter, which must be injurious to cattle, by their inhaling the gases that are given off from the stagnant pools: we know how prevalent bronchitis is in our own country when cattle are turned on the fens.

It is a contagious and infectious disease, as many know. I am sorry to say it has been the ruin of many, and, if any one can contribute towards putting a stop to such a disease being introduced into this country, I think he ought to give publicity to it.

The manner in which the foreign cattle are examined to prevent the disease being sent us at the present time is, I think, quite absurd, and I make no doubt many agricultural gentlemen will be the same way of thinking that I am.

A ship comes to the pier with cattle; the examiner is there, who sees no disease about them: they are passed, considered sound; but some of them are not in England many days before they are found to be diseased. Now, in my opinion, they must have been diseased before landed. The disease will remain dormant in the system for weeks, perhaps months, before it is fully developed. How is this to be prevented? It would be an expensive affair to have the cattle remain in any place for a month before they are allowed to be sent into our markets; although, in my opinion, it would be the way to prevent our having any more introduction of the disease, and we might in time get rid of it.

December 7, 1846, I was appointed veterinary surgeon to examine the foreign cattle if the officers thought them to be diseased. I had no diploma, but, am pleased to say, I gave great satisfaction to the Customs, also to the merchant, by making a post-mortem examination before I condemned any.

November 1847, the Customs wished me to obtain my diploma: I presented myself for an examination, but was unsuccessful. The gentlemen at the Customs kindly offered to keep the appointment for the next three months, but I, being in great trouble at the time, thought it best to resign. A person of the name of Bark, hearing I was about to resign, presented himself for the appointment, he having been so fortunate as to gain his diploma some years since, when veterinary pupils were not examined on the diseases of cattle. The gentlemen at the Customs wrote to Professor

Sewell, at the Royal Veterinary College, to know if Mr. Bark was a member; the Professor, in reply, said he was, but he could not say any thing about his knowledge of cattle, &c.; but, in defiance of the Professor's letter, Mr. Bark succeeded in getting the appointment. A few days after, Mr. Bark came to ask me if I would write down the symptoms of the diseases for him, for he could not see any difference in those that were called diseased and those that were healthy. Now, my lords and gentlemen, I appeal to you if this is a person qualified to become an Inspector of Imported Cattle: proofs of the contrary are but too numerous. A few weeks back I was walking in Aldgate, not far from where the foreign cattle are landed, and seeing a grey bullock in the street, and a crowd of people about him, I crossed to look at him, and waited three quarters of an hour to see what would be done with him; I could wait no longer, and left him standing in the same spot. There was also a white one some little distance from the grey. I will now describe the symptoms they presented, and leave the reader to form his own idea as to what disease they laboured under. They stood in one spot, unable to move; the breathing greatly increased; a discharge from the nostril and mouth; the eye inflamed, having a wild appearance.

I find the symptoms vary much in these animals: some have a peculiar shaking of one hind leg, the bowels costive, the coat looks unkind; some are so furious that it is with danger they can be got at: they are in general sent in the conveyance cart. Others shiver; have diarrhœa, which is very fœtid and black; the eye is inflamed, and looks wild: there is also an itching of the ears—the cough is sore and husky—a discharge from the nose and mouth; and it is with much difficulty the animal can be made to move, from the great tenderness in the back and loins.

Trusting these remarks may lead to the appointment of a more efficient Inspector, and to a more careful and extended examination,

I am, my Lords and Gentlemen,

Your most obedient servant,

THOMAS G. WEBB,

Late of Whitechapel.

FRACTURED LIMBS OF HORSES.

By JOHN YOUNGHUSBAND, *V.S., Greystoke.*

FROM the cases of broken bones recorded in the July Number of THE VETERINARIAN, I take the opportunity of forwarding you the two following, in which, I think, you will find a similarity.

In the month of October 1847, a middle-aged cart mare was

observed to receive a kick from another horse that was grazing alongside of her in the field, which caused a degree of lameness attended with heat and swelling of the part, for which rest, fomentations, &c. were had recourse to, which in a few days alleviated the symptoms, and little further notice was taken of her, as she appeared to travel tolerably well, and was allowed to graze in the open field. The owner having occasion to attend Cocker-mouth market, a distance of some seventeen or eighteen miles, though still a little lame, he considered her so much improved as to be capable of performing the journey; and she accomplished it remarkably until within a few miles of the town, when she was found to flag, and to grow somewhat lamer than when she first set out. After getting his business done he again started for home, and, as he said, though still very lame, she got on wonderfully to within a mile of home, where upon some uneven ground she made a trip, stumbled, and fell. In the fall he was dismounted, but escaped unhurt. Not so, however, the mare; for, on her arising, she was found to have become intensely lame, so much so that she had great difficulty in reaching her stable. Next day I was called in, when I found the superior part of the radius was fractured about two inches below the ulna or elbow, corresponding exactly with a mark left from the effect of the blow.

Subsequently the mare was destroyed, and my prognosis verified.

CASE II.—This, a similar case, happened nearly about the same time, in the same month, and belonged to a Mr. W. Hetherington, in my immediate neighbourhood.

The history of the case is this:—The mare was perceived to be lame for a few days prior to my visiting her, and the near fore arm and elbow was found to be hot and swollen, but still capable of performing a little work. The place was well fomented night and morning, and little more than usual care was bestowed upon her; when one day, being destined to a harder job than usual, and in the cart, while travelling upon the road, she accidentally struck a stone which had nigh brought her to the ground, and from that moment she was with the greatest difficulty made to shift her place. She was now unyoked from the cart, and with time and care conducted to the homestead, and, as she appeared to suffer much pain, my assistance was required. On my arrival, I found the mare in great agony, wet with perspiration, and suffering severely from irritation, inflammatory swelling, &c., and, upon examining the part, I found a small wound discharging a thin ichorous matter, which had not been observed before. On a closer inspection, I thought I could detect a slight *crepitus*; and a little manipulation of the part seemed to give excruciating pain. I now acquainted the owner with the nature of the case, and what was

likely to be the result, but, as the mare was expected to be in foal, he wished her to have a fair trial. Well, to abate the inflammatory symptoms, she was bled; had physic; the place was regularly fomented; and she was put upon an antiphlogistic regimen; and from all this the place in a few days assumed a brighter aspect: bandages, &c. being used at the same time. She was thus kept for the space of three weeks, when the owner, considering there was not much improvement, and not being disposed to run to much expense, had her shot. Upon laying open the parts contiguous to the fracture, and examining them, it was found to have been a transverse one. The principal part of the bone had become carious, with the exception of a small portion around the edges, and that had thrown out a little ossific deposit.

I forbear making any comment upon these cases, as I consider the one in your leader for last month will satisfactorily respond to mine; but I can vouch for the truth of my statements, and I think them the more remarkable, from having happened, both, so nearly simultaneously; both (supposed to be) from blows; both in the near fore arm; and both close to the elbow.

FRACTURED LIMBS OF HORSES.

By JOHN NELSON, V.S., *Highfield, Sheffield.*

To the Editor of "The Veterinarian."

Sir,—KNOWING that fracture of the extremities of horses and other animals, men included, such as Mr. Broad has described in your July Number, occur more frequently than owners of horses and cattle are disposed to believe, until the bones actually separate, and that, for that reason, many a valuable animal has been lost, when a few weeks' rest, with simple treatment, would have set all right; for the benefit of your readers I have selected from my case-book the following cases, and as briefly as possible have transcribed them for your Journal:—

CASE I, *Aug. 10th, 1836.*—Mr. John Oliver, Ecclesall Mill, near Sheffield, desired me to see a strong cart-mare which was lame. On my arrival, and examining the near fore leg, I found it very much swollen, with four abscesses formed in various parts around the radius, from which there was much discharge of bloody and offensive matter. On moving the limb I could distinctly hear and feel the crepitation of a broken radius. I inquired of Mr.

Oliver how long the mare had been lame, when he informed me eight weeks; but not being much lame during the first two weeks, she had done nearly her usual work. He said, she had in that time been with a cart to Doncaster, and brought by herself sixteen loads of wheat a distance of about twenty-two miles; after which she became lamer, and was in consequence taken off her work. Meanwhile, she was travelled about four miles, every day or two, to the blacksmith, to have the leg dressed (which had gradually got worse up to the time I saw her); and afterwards he was advised to turn her out in the grass field, where she got down, and could not move the limb any more after, but completely carried it when made to move. I inquired of Mr. Oliver what had been the first cause of the disease; when he informed me that a strange horse was put in the stable into the mare's stall, and she was then allowed to go to the stable by herself, the door being open; when, of course, she went to her own stall, and the strange horse kicked out, and struck her on the inside of the arm bone, rather towards the front, about three inches from the inferior extremity. I informed Mr. Oliver that the mare's arm had been fractured from the time she was kicked by the strange horse, eight weeks ago, but that the fractured bone had not divided until now; and from the great amount of suppuration going on in the part, I considered he had better have her at once destroyed. To this he would not consent, she being a favourite and a valuable mare. He then called in Mr. R. T., veterinary surgeon, and I heard no more of the case until about a week afterwards, when, passing by, Mr. Oliver desired me to go and destroy the mare; for, said he, "she is killing herself with tumbling about with pain." Accordingly I went, and found her in the agonies of death, which I speedily put an end to. After I had killed her, I proceeded to examine the injured limb; and on dissecting out the arm bone, through a great amount of swelling and suppuration, I found it was fractured a few inches from the superior extremity. On the bone being carefully cleaned, the injury it had received appeared as the mark of a blow upon the inner side, rather inclining to the front, about three inches from the inferior extremity, which had fractured it to the length of about seven inches in a perpendicular line. There was also an oblique fracture upwards, about one inch long, running from the place where the blow had been given first; and another within an inch of the lower extremity of the bone, which ran in a downward direction, about six-eighths of an inch in length. At the upper end of the perpendicular fracture an oblique one went from the inner side of the radius, taking both sides of the bone to about an inch and a half from the outer superior extremity; the whole length

of the fracture being about twelve inches, leaving the ulnar bone sound; and this, from the rough surface and fresh appearance of fracture, had evidently only occurred the day I first saw her, from falling in the field after the ulna had given way. The whole of the radius was cased over, to the thickness of from a quarter to half an inch, with additional bony matter, with the exception of the fractured parts, and thereabouts was a space of some six-eighths of an inch, where the fractures could be distinctly seen in the bone, denoting the length of time it must have been on the work.

CASE II. *June 2, 1837.*—Mrs. Barstow, Crab-tree Bank, near Sheffield, sent her servant-man to my house for a bottle of liniment for a horse which had, the night previous, been kicked on the inner side of the near hind leg, about six inches above the hock, in the situation where the tibia is the least covered with muscle. I told the servant he had better rest the horse; when he informed me he was not lame. I did not see or hear any more of the horse until about eleven o'clock in the morning of the 7th, when I met the servant and Mrs. Barstow's son with the horse in question, and two others, on the Little Sheffield-bridge, with a cart load of wood. The servant stopped the team, and beckoned me to come and look at the horse's leg which he fetched the oils for: I accordingly went, and examined the leg. There was a small wound, as before stated, about six or eight inches above the hock, and on the least covered part of the tibia. I at once pronounced the horse in great danger to be worked, and that they must be exceedingly careful not to twist him about, or he might break his thigh. "Oh!" said the servant and the son, "he is not lame in the least; he does not even favour the limb." "Well!" repeated I, "you must be very careful, for all that, with him." The horse was in the shafts, and the servant was about to take him out with the other two into the dike to water, when I left them. My house is about three hundred yards from the bridge. By the time I got home, a messenger arrived to say that I must go down to the horse dike immediately, there being a horse there which had fallen into the water. Accordingly, I hastened down to the place, when, on inquiry, the servant told me that he hooked the chains of the pin horse into the hames of the shaft horse, and rode on the first one into the water; when, in the act of turning after the horses had drunk, the shaft horse fell down in the water, and that now he is so lame that he cannot use the leg in the least. On examining the limb, I soon discovered that the tibia had come apart at the place where the blow was given six days ago. I informed the son that the thigh was fractured at the time the horse was kicked, and that now it had divided, as, I told him before, I was afraid it would do.

“ Well !” he said, “ it is a bad job, for he was such a powerful horse for us in the wood ; he was a team almost of himself.” By this time a large crowd had gathered round the place, among whom the general opinion was that he must be destroyed. To this I would not consent, but I made this proposal to the son, that, as my stable was within about three hundred yards of the house, I would either buy the horse at a dead price, or I would give 20s. towards a trial to cure him. To this he readily assented. Accordingly, I procured some temporary splints and bandages, and bound up the fracture as well as possible. I then applied some webbing around the upper part of the limb, and myself and another supported the fractured limb while the horse moved the other. By this plan he was got to my stable pretty well. I then put him into slings constructed after the following manner :—The mouth of a six-bushel sack was sewed up ; two holes were then made at the sides, close to each end. A rafter was passed through, and a strong ring sewed to each corner of the sack ; at the ends of it two chains were attached to two of the rings. No beam being convenient to cast the chains over, four holes were bored through the chamber floor, through which the two chains were passed on the off side of the horse, and then passed downwards through the holes on the near side, and through the rings ; two small hooks being attached to the ends of the chains, which were hooked in the upright chain a proper length. Four strong buckles were attached to the front and back parts of the sack, to receive the straps of two strong girths, one for the breech, the other for the breast. A strong strap was attached to the sack at the lowest and middle part, under the brisket, which was received into a buckle in the centre of the breast girth, passing between the fore legs. Two more buckles were attached to the sides of the girth, which received the ends of a girth that went over the posterior part of the neck. The strap between the fore legs kept the breast girth from rising too high, and so preventing the return of blood in the jugular veins by its pressure on them. Another breast and breech girth, with chains attached to each end and hooks at their ends, were hooked into the upright chains by way of support of the straps of the slings, and to secure the body of the horse when resting in the slings in an horizontal position as much as possible. Thus could the chains be attached to the four corners of the slings, instead of one ring in the middle of the rafter. The giving way of the slings, when either the fore or hind parts of the horse, separately, was allowed to press on them, was thus avoided.

The horse weighing about seventeen or eighteen cwt., it was necessary to make every part very secure. In this case chains answered better than ropes, as the hooks could be put in the links

either to tighten or slacken the slings at pleasure, and there was no liability of their giving way. Having adjusted on him the slings, I proceeded to set the leg, by bandaging up the whole limb from the foot to the stifle joint, taking care that they were so applied as to make the limb of one uniform thickness, tapering towards the foot. I next applied two splints, notched every three inches like a butcher's shamble, on the outside of them, and had them shaped to the leg of the horse as near as possible; they were about two and a half inches wide. Their lower ends rested upon the ground—the upper reached the stifle joint. I next applied two splints before and two behind, and about eighteen inches long; two were of steel wrapped in pads, and two of ash wood. The splints were secured in their proper places by bandages and buttons on their outer sides, and occasionally by a little pitch, the whole being fastened together by straps and ropes. For about a foot in length, around the upper part of the splints, I had them regularly rolled with soft rope, as high as the stifle joint. By the time I had got all things adjusted, the horse appeared faint with pain, and broke out into a profuse sweat; but no sooner did he feel the slings to be a support to him than he carried both hind legs under his body, relaxed his knees, and threw all his weight into the slings. In this way he lay apparently quite composed for about an hour, when he resumed a standing position again. I then applied fomentations of tolerably hot water to the whole limb, so as to keep it constantly moist. I gave in a bran-mash nitrate of potass half-an-ounce, potassio-tartrate of antimony one drachm, three times a-day for fourteen days; then twice a-day for four weeks; and then once or twice occasionally for four weeks more, which completed the cure. At the end of five weeks I first perceived him to bear a little weight on the fractured leg; after that time he could be perceived almost daily to improve. At ten weeks and a day, having left him out of the slings for a little while in the stable by himself, I found him, on my return, lying down on the broken leg. This rather alarmed me, but I took hold of his tail, and he sprang up manfully. I then gave him walking exercise for seven days, putting him in slings at night. The day after eleven weeks I took him home, and he was turned out to grass for a month; afterwards he was taken gradually to his usual work. Some idea may be formed of the size and strength of this horse, when I tell you that, in about six months after, he was sold to Mr. J. Vail, Norton Woodsetts, who informed me that he some time after took from Sheffield to Woodsetts two tons, five cwt. of manure, besides the weight of the cart, a distance of about three miles, and heavy up-hill road half the way.

CASE III. *March 22d, 1838.*—Mr. J. Holnes, contractor, Broomhall-street, Sheffield, requested me to see a mare which had

the night previous been kicked on the inner side of the tibia, about the middle of the bone. On examining the part, I perceived a few small wounds about the size of a person's finger-nail, and a little swelling. I ordered fomentations and digestive liniment, and informed Mr. H. that a few weeks' perfect rest would be required, as I was afraid the thigh-bone was fractured, though not parted. This advice Mr. H. completely ridiculed. "Well," said I, "it is impossible for me to be certain, but I am very suspicious that it is the case; and if you do take her out before the bone has had time to unite, which would require several weeks, you may break it the first time you do so." The above treatment was continued until the afternoon of the 25th, when I had her led in hand gently for the distance of about one hundred yards, and the mare walked perfectly sound. The swelling and wounds appeared nearly to have disappeared; still I advised Mr. Holmes as before, but he replied, "Oh, I shall take her to ride to-morrow." "Well," said I, "you may break the leg if you do." On the morning following Mr. Holmes accordingly mounted the mare, and, having ridden her about ten or twelve miles in the neighbourhood, brought her home at noon, and informed me that she had carried him "like a stag." He took her out again in the afternoon, and, when about a mile from home, snap went the thigh-bone while he was on the saddle. The mare was killed on the spot. I did not get to see the bone. Mr. Holmes afterwards informed me, that, if all the men in the world had told him, after being carried so well in the forenoon, such would have happened in the afternoon, he would not have believed them.

MR. NELSON'S FORCEPS.

I perceive a short account by Mr. Cartwright, in your last Number, of my forceps. I beg to state that if No. 1, which he says is too weak, slips off from the ears, lips, nose, tail, or any other part of the skin or extremities, when half the blades has hold, under ordinary circumstances, with the pulling of one man, then they are too weak in the springs. But the tenth part of that strength, if applied advantageously either to pull or push back the fœtus where it was most wanted, so that a rope could be applied, would frequently get over very difficult cases in a little time. I differ with Mr. Cartwright respecting No. 2, which he prefers for general purposes. I prefer No. 1, having now discontinued making Nos. 2 and 3, except when they are ordered; because No. 1 can be applied to the nose of either calf or foal without injury, as well as the others, especially since he has those with ropes, too, for calves' noses, which can be applied where a straight instrument cannot be. I have no doubt he will soon see them in the same light.

With regard to the danger of applying the forceps at full length, I can say, to the best of my knowledge, I have used them at full length where the cow has fallen down (while the forceps were in the womb) at least thirty times, and I have not perceived any difficulty in preventing the injury spoken of. My method is, when I see a cow likely to fall down, should the forceps have hold of the foetus, to bear up, and allow them to pass loosely through the hands by relaxing the hand-hold. If not hold of the foetus, they can be drawn out of the womb. The best situation for a cow or mare to be in for using the forceps is a middle standing in a stable, cowhouse, or shed, with plenty of room backwards. The latter may with advantage be put into slings, to prevent her throwing herself down. And a bull ring may be applied to the nose of the former for the same purpose, and agitated with the hands.

If Mr. Cartwright pleases to send me the forceps he complains of, I will, with pleasure, return him a stronger pair; utility being the object I have in view.

Your's respectfully.

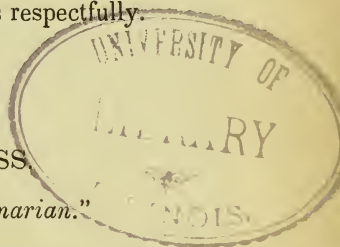
August 9, 1848.

SHOULDER LAMENESS.

To the Editor of "The Veterinarian."

Sir,—HAVING from various circumstances had occasion to become acquainted with the doctrines of old veterinary authors regarding lamenesses, I was much surprised, on reading an article in a recent Number of THE VETERINARIAN, to see it stated that Solleysell's account of shoulder lameness "includes, pretty well, all observation since his time has taught us concerning it." Now, Mr. Editor, as I am unwilling to own we have made the little progress in knowledge since Solleysell's time which your statements would imply, and believing also that shoulder lamenesses may be decided on as to nature and seat with a certainty, which your remarks would lead us to suppose barely possible, I beg to call your attention again to this subject.

As you justly observe, the shoulder "comprehends many and various parts, and is complicated altogether in its structure." Now I assume it can be satisfactorily shewn, that "various parts" of the shoulder are liable to disease and injury, of which conditions lameness is one prominent symptom, and like other symptoms, instead of being always the same, its character varies in accordance with the nature of the existing ailment. "*Shoulder lame-*



ness," then, is a general term, and denotes no more respecting the intrinsic nature or seat of any disease in the shoulder, than the term "*foot lameness*" does with regard to disease in parts composing the foot. In your systematic article I was anxious to have seen clearly pointed out, not only the difference between *symptom* and *disease*, but likewise, what is essentially important, the *varieties* of morbid conditions to which the shoulder is known to be liable.

The fibro-cartilaginous pad of the *flexor brachii*, where the tendon of that muscle passes by means of a synovial bursa over the articular tubercles of the humerus, is a common (and perhaps the most common) seat of shoulder lameness. Some cases of this kind are of a comparatively trivial nature; but, in the dissection of others of a more aggravated character, the tendon has been found abraded on its synovial surface, and its fibres raised even into shreds, from friction against the diseased articular cartilage or exposed cancellated structure of the opposing bone. The symptoms of "shoulder wrench," given by Solleysell, are pretty correct as far as they go, when applied to this affection in its ordinary or milder forms; but additional symptoms may be enumerated, as detectible by manual examination and otherwise, which will materially assist us in arriving at a correct diagnosis.

Another kind of "shoulder lameness" occurring within the capsular ligament is found connected with abrasion or absorption more or less extensive of the articular cartilages of the joint, and sometimes with abrasion or even caries of the bones. The capsular ligament being remarkably capacious, becomes distended by the increased amount of altered synovia which accumulates in its interior, and also not unfrequently thickly coated with lymph on its synovial surface. The symptoms of this form of disease differ, in some degree, from those indicating sprain of the *flexor brachii*, and, from the uniformly serious character of the affection they denote, are, I think, deserving of mention in a treatise on "shoulder lameness."

Again, we have a disease called "shoulder slip," which is far from being of unfrequent occurrence, and the lameness attendant upon it differs from that accompanying either of the morbid conditions already noticed. It often occurs in young draught horses when first put to work, especially in those used for the plough; and the off-side horse is most likely to suffer, from the writhing way in which he steps in and out of the furrow before he becomes accustomed to his proper step. It is an affection, however, sometimes found in other horses, and consists essentially in rupture of the muscular and tendinous fibres passing from the dorsum of the scapula to the outer part of the head of the humerus. In the first instance, it is usually accompanied by some swelling; this, how-

ever, gradually subsides, and ultimately there is a perceptible want or loss of substance on the outside of the scapula and shoulder joint. The lameness does not seem of a very painful character, and the peculiarity of the affection consists in the slipping or rolling out of the shoulder joint when weight comes directly upon it during the motion of the animal, which is due to the want of support afforded to this part of the limb when its investing and connecting muscles are not in their normal condition.

Sprain of the flexor brachii, articular disease of the joint, and "shoulder slip," are three affections of the shoulder which most persons in practice must have seen and have had occasion to treat. I have long ago heard them described with reference to their difference of nature and seat, and have seen them illustrated not only in the living subject, but by numerous preparations of morbid anatomy. As these lamenesses, when occurring in their ordinary forms, are not equally dangerous as affecting the future value and usefulness of the animal, it becomes important to acquaint ourselves as fully as possible with their individual peculiarities of symptom, nature, cause, and treatment. Your articles on lameness, Mr. Editor, have for their object the furtherance of this desirable end; and I trust you will yet favour us with some remarks on a part of the subject, which, along with many other readers of THE VETERINARIAN, I conceive has not received justice at your hands.

I am, Sir, your's obediently,

JOHN BARLOW, V.S.

August 14th, 1848.

* * A reference to the article on "Shoulder Lameness," in our number for July last, will shew that Mr. Barlow, in his *cacoëthes culpaudi*, has, to suit his own purpose, quoted a *part* instead of the entire of a sentence, and thereby completely distorted the meaning thereof. The sentence in question, in the original, stands thus:—"Solleysell was perfectly well acquainted with the latter (the peculiar 'movement in the fore leg'): his description includes pretty well all observation since his time has taught us *concerning it*" (viz. the "movement in the fore leg," and not, as Mr. Barlow construes it, *the subject of shoulder lameness*). The disease in the shoulder joint, said by Mr. Barlow to be omitted in our paper, is there described through a quotation from Leblanc. And with regard to "shoulder slip," the phrase is too little used in the south to need any mention. The disease which he, without proof, asserts to consist in "rupture of the muscular and tendinous fibres," is described in the paragraph treating of shoulder lameness occurring from certain practices peculiar to riding-schools.—
ED. VET.

DANGER OF GIVING DRENCHES.

By W. Cox, M.R.V.S., Ashbourn.

THE danger arising from giving draughts to animals has been noticed by veterinary surgeons, and papers upon the subject have from time to time appeared in the pages of *THE VETERINARIAN*. Mr. Stewart, of Glasgow, I believe, was the first who wrote upon the subject, and to him the profession are much indebted.

In your last No. but one there was a paper upon this subject from Mr. Arkcoll, my successor at Leek, giving you some good advice about lowering animals' heads while administering drenches, &c.

In my opinion, the danger cannot be altogether avoided, unless the stomach-pump were used, and that is found too cumbersome and expensive for general use. Therefore, the horn and the bottle are the instruments used; consequently it is necessary to know which is the safest instrument of the two.

All the accidents that have come under my notice have arisen from giving draughts out of bottles.

When the horn is used, and its contents poured into the fauces, the animal's head should be lowered a little between each hornfull, so as to enable the animal to deglutate with ease, as, if any symptom of coughing presents itself, it must be lowered altogether.

This cannot be so well attended to, or seldom is, when the bottle is used. It may perchance hold a pint or a quart, and the head is held up until the last drop is poured out: hence arises the accident when the bottle is used.

During the month of March last, at my residence, at midnight a cry was made for the horse-doctor to attend a horse that had been drenched with a gallon of buttermilk (churned milk), and was become very ill. But I was out, attending a horse at a short distance labouring under enteritis.

I will here digress, and say how highly favoured the country veterinary surgeons are. By day, as he rides along he may study Nature in all her works. Beginning with the grasshopper, he may go up to the sturdy ox, and down from the tall cedar to the hyssop which springeth out of the wall. Yea, he witnesseth the rising and the setting sun. The stars in their courses are his lights, and shineth upon his path, and the moon likewise.

But to return: I was obliged to leave my enteritic patient to visit the buttermilk one; when I was told by the owner that he had been informed that a gallon of buttermilk given through his horse's nose would destroy all the worms he had in his inside:—so it did; but it killed the horse, too!

ON VETERINARY SURGEONS AS EXAMINERS FOR IMPORTATIONS OF FOREIGN CATTLE.

By ALEX. HENDERSON, *V.S. to H.M. the Queen Dowager.*

To the Editor of "The Veterinarian."

Sir,—IN looking into the last Number of THE VETERINARIAN, my attention has been drawn to an extract from *The Times* parliamentary reports, referring to inquiries made by Mr. Bagge, Mr. W. Milnes, and Mr. Henley, respecting the importation of *diseased* sheep. Mr. Labouchere, in reply, stated that he *believed* that skilful veterinary surgeons were employed to inspect the importations into the port of London, and that he also *believed* it was the same in all other ports.

It must be evident to every one, that the greatest possible attention should be directed towards so important a subject as the health of animals destined for the food of man, so that an animal suffering under any disease which would make it unfit for food should not be allowed to enter the markets. Now, it is very well known to professional men, that an animal may have a disease of a virulent nature lurking within it, one perfectly apparent to an experienced professional eye, though no strongly-marked outward signs may be visible.

It is therefore clear that none but properly educated and experienced veterinary surgeons should be chosen, and that the appointment of such persons should be approved of by a much more competent authority than a Custom-house officer. By such a plan, respectable veterinary surgeons really qualified would readily be found, who, for their own reputation's sake, would not allow any infected animal to pass them, and hence there would be a much less number of diseased animals admitted.

It appears from the same report that but very few sheep, on landing in the port of London, have shewn outward symptoms of disease; but other reports state that many foreign sheep have been affected by the disease *after* their arrival in England.

I would strongly recommend every one interested in this important subject to peruse the Editorial remarks on the sheep disease in THE VETERINARIAN for August 1848, p. 471.

I am, Sir, your's obediently.

August 22, 1848.

ON CARPITIS—REGISTRATION—UNCERTIFICATED PRACTITIONERS.

By ARTHUR CHERRY, M.R.C.V.S., London.

To the Editor of "The Veterinarian."

Sir,—AS you have done me the honour to advert to my paper on *the disease to which I have given the name of "Carpitis,"* in your valuable paper on "Splint," in the last Number of THE VETERINARIAN, I should wish to correct an error in nomenclature, which, in some measure, I am answerable for—namely, the term which Mr. Cherry (sen.) has chosen to give to the disease; it being an acknowledged plagiarism from a term of my own, shortened and slightly altered from the original, which was, "a disease in the knee *similar* to spavin in the hock." For the term itself, as well as the knowledge of the disease, that gentleman is entirely indebted to me, though this has never been acknowledged or adverted to, but has been, from the time I made the existence of the disease known to that gentleman (some time in the year 1833), invariably claimed as his own.

I should not advert to this subject, but I certainly do not like so gross a plagiarism to pass uncontradicted; the more especially, as the original investigations and collection of specimens illustrative of the disease occupied me for more than eighteen months, during which time Mr. Cherry was in direct opposition to all my views.

I was well aware of Solleysell's remarks on what he calls "Osselets," but *they are not* what I define "Carpitis" to be, which a perusal of my paper, I think, will shew. Though carpalis is very frequently accompanied by such kind of splint as Solleysell describes, yet they are two distinct diseases, affecting different structures, and shewing different results as to recovery for useful purposes.

I see also, in the same Number of your Journal, a letter signed "R. B. P." Why could he not sign his name? I do not like to notice anonymous communications; but as the same subject has been matter for correspondence between myself and several of our country brethren, I shall take notice of the subject, not so much for "R. B. P." as for the information of the country practitioners at large.

When I first gave notice of motion regarding *Registration* two years ago, the very proposition now made by "R. B. P." formed

the second portion of the notice ; and such was withdrawn only for convenience, and with the express understanding that it should stand over until it could be brought into operation, when its passing the Council could hardly be expected to meet with any opposition so far as regards the Council and myself as acting Registrar.

But why, after an interval of two years, has it not been carried out ?—will naturally enough be asked : and to those who know nothing of these matters it may appear strange, remiss on the part of the Council, and on my part, as acting Registrar, indicative of supineness and neglect. If those who are prone to *fault-finding* choose to hold such opinions, they are quite welcome to continue to entertain them ; for when once a "*cacòèthis reprehendi*" is indulged in, it soon grows so inveterate that there is no cure for it, and no explanations suffice.

But to those not so afflicted the reason is simple enough, viz. that the names and *addresses* of a sufficiently large portion of the members of the body corporate are not known to render such a labour really justifiable, as an incomplete or incorrect list would be worse than none at all. The reasons for this want of a sufficient number of returns arises from the indolence or neglect of the members themselves. If, like the wagoner who prayed to Jupiter to get his wagon out of the hole, instead of putting his shoulder to the wheel and so assist the labour of his horses, the country practitioners will not give their assistance in carrying out such measures as may be judged expedient by the Council for mutual benefit, they must remain in their present position, like the wagon in the hole.

With this subject also is connected another, upon which I have had several communications addressed to me, some asking my advice as to the best manner of treating self-styled veterinary surgeons and quacks of various degrees—others telling me of their evil doings. To those who have thus given me much information I tender my best thanks ; and as I have been honoured by having my advice sought upon the subject, of the best manner in which such quacks and pretenders should be met, I will here, for the benefit of the younger and more irascible members of the body corporate, make a few observations.

Do not oppose them by *finding fault with their ignorance*, but shew by your superior skill, knowledge, and propriety of conduct, that you are of a superior grade. Every attempt at running them down will only lead to their notoriety, which is what *they* seek ; and I could mention more than one instance, in our own and in the medical profession, where such men have been positively *made* by

opposition, while those who opposed them, though proper graduates, have been seriously injured.

Never quarrel with them: treat them with civility; it will always be of service in more ways than one.

Bear in mind that men who will assume to be what they are not, cannot be possessed of honourable feeling, and will not hesitate to do you every injury in the most dangerous of all manners, viz. by secret hints, whispers, and every species of wiliness; and these men have always some acquaintance who act as spies on your every action, and report, not without exaggeration, any thing they may fancy will suit their own purpose or their friends, the quacks.

Do not forget that there is a law of *libel*; for though perfect truth may be on your side, it is difficult oftentimes to prove it so as to satisfy a jury, for the whole onus of proof will rest with you. Avoid, therefore, so serious an evil.

Propriety of conduct, assiduity, and a fair knowledge of your profession, will always command respect, and, in the long run, a good practice.

The remarks I have made on quacks and pretenders do not apply to another class, who are not to be treated with disrespect, though they may not have been students at the veterinary schools; who by their propriety of conduct, natural good sense, and acquired skill, have gained positions in which they are respected, and deservedly so; and right glad should I be if I could hold out the hand of fellowship to them as members of our body corporate. Need I more than name such a good man and true as your old correspondent, Mr. J. Younghusband, of Greystoke, as the representative of the class I mean?—or another, though not a correspondent of your Journal, Mr. Colman (the elder), of Tilshead, Wilts, whose son graduated not long since?—and many more, who want but the form to place them on a par with the best of us, and whose addition to our body corporate would do honour to it.

I have scribbled a long rambling epistle; but some of the topics are of importance, and may draw attention so as to lead to good: if so, I shall be satisfied.

And am,

Your's obediently.

August 14, 1848.

Home Extracts.

PROFESSOR SIMONDS' LECTURE AT THE YORK MEETING OF THE ROYAL AGRICULTURAL SOCIETY.

ON Wednesday, July 12th, a lecture on the subject of calving and lambing was delivered at the De Grey rooms, by Professor Simonds, of the Royal Veterinary College. His Grace the Duke of Richmond occupied the chair. The lecture was illustrated by coloured diagrams on a large scale ; and as in their absence much of the lecture would be unintelligible to the general reader, we shall confine ourselves to an outline of the Professor's remarks.

He commenced, by saying, that he presumed no argument was needed to prove the importance of the subject, either to the practical breeder, or to those whose interests were more immediately identified with the feeding and rearing of our native breeds of cattle. It was a matter which came home to all, being intimately connected with our agricultural, and, therefore, with our national prosperity. Englishmen might well be proud of their improved breeds of cattle and sheep, which are at once the boast of Britain and the envy of the world. But it might be asked, how often had the hopes of the breeder been destroyed, and his exertions lost, in attempts to improve the breeds of cattle, by the casualties that attended on their birth ? essential to success is a knowledge of the principles to which he (Mr. S.) had alluded, and which would form the basis of his discourse. In such a dilemma science came to our assistance, and offered a ready and helping hand to combat difficulties and guide through danger. It was not his intention to enter on the disputed question as to the best modes to improve the breed of any particular class of animals ; but he might be allowed to make a few passing observations on, what is called, the theory and practice of breeding.

Breeding, with a view to improvement, may be said to be founded on Nature's established law, that *like produced like*. It might, however, be added, that this was only true in part, for there was a constant tendency to change, arising from a variety of causes ; such as domestication, living in a different climate or on a different kind of food. The management to which animals are subjected had also its influence. While these causes may be looked upon as the chief in operation to produce this tendency to change, at the same time they are the means (added to others) which are used to effect the improvement of a race. In order to improve a

particular breed, two plans are advocated by two sections of practical breeders. One of these is commonly called the "in-and-in system," the other the "crossing" plan. The in-and-in system was strongly advocated by the late Mr. Bakewell, and his example had at least the effect of destroying the prejudice which existed against breeding from animals having a relationship. But this system is generally considered to deteriorate the breed after a time, and probably is limited, so far as its benefits are concerned. Every improvement of a breed requires the application of the same means to retain it which had produced it; and the chief of these is care in the selection of stock, so as to avoid a predisposition to hereditary defects or disease. Crossing is founded on a principle, just as secure as Bakewell's in-and-in system, added to the care in selection. Certain diseases are hereditary, as is colour; and they well knew that they could only get rid of a particular colour by crossing. Still, this crossing required equal care in selection to avoid degeneration. Mr. Simonds illustrated this peculiar susceptibility to disease or defect, by referring at some length to the fact of the large proportion of "roarers" among the horses in Yorkshire. Animals bred from these "roarers" possessed a great predisposition to the disease; so much so, that if these Yorkshire horses were exposed to the ordinary causes of the affection, the peculiar defect would be developed, while other horses similarly exposed would escape. That which is true with regard to horses applies equally to cattle, sheep, and all domesticated animals. The capability of *like to produce like*, Mr. Simonds further illustrated by referring to the results of crossing various breeds of cattle, such as Devons with Herefords, both the colour and form of the produce being thereby altered or modified. Among animals in a state of nature the tendency to change does not exist to the same extent as in those which are domesticated; therefore degeneration of a breed does not equally take place. The lecturer then passed on to remark upon the importance, in crossing animals, of suiting the male to the mind or taste of the female. Some might smile at this notion, but Mr. S. shewed, by several facts, the importance of paying attention to this point. Professor Simonds then came to the two main divisions of his subject, namely—1. The structure and functions of the organs principally concerned in the reproduction of the species; and, 2. The principles which should guide us in cases of difficult or protracted parturition. He observed that as every part of the body of the foetus had to be perfected at the same time; and as the development of every organ depended upon the amount of pure blood which it received, so it was necessary that the blood which went to the extremities, and that which went to the head, should be alike

in purity ; consequently, in the young of animals there are vessels for the equal distribution of the blood, which are not met with in adults. The period of utero-gestation, or length of time that the fœtus is detained in the uterus, depended upon a variety of causes, and differed in nearly every animal. The mare carries her young 48 weeks, the cow 40, the sheep 22, the bitch 9, and the pig 16 weeks. Was it not astonishing that impregnation should take place and the fœtus be perfected in the short space of nine weeks ? If, however, they descended the scale and looked to other animals, they would find that its development would be effected much earlier. When the fœtus was fully developed, it was expelled from the womb, or, in other words, labour took place. Now, unless the uterus possessed capabilities for throwing off its burden, neither birth nor abortion could occur. But labour did not entirely depend upon the full development of the fœtus, nor upon the capability of the fœtus to live independent of the mother.

Every one would be acquainted with the fact that impregnation was a mysterious effect taking place from certain causes, and ending in the birth of the young. The fitness for impregnation was always associated with a train of appearances or symptoms which denoted the condition of the animal at that particular period. When parturition was about to commence, the animal became restless, and separated herself from the herd : she lay down, and rose frequently. These and other symptoms are associated with intermissions of pain, which are called propulsive or " bearing down," continuing with more or less force for a certain length of time. The time that the pain continues would depend upon a variety of causes. First, upon the freedom with which the mouth of the womb dilated itself : for during the whole period of utero-gestation the young animal was, as it were, enclosed in a box, which had to be opened before it could escape. The dilatation of the mouth of the womb was always associated with pain ; and here he would remind all proprietors of stock not to be in too great a hurry with their animals at the time of parturition, although they may express great uneasiness. He had known many cases where valuable animals had been lost in consequence of the impatience on the part of the owners in seeking too soon to give their assistance to the mother. He had also known cases where the symptoms of approaching parturition had passed off, and not returned for two or three days ; for it did not follow that, when the mouth of the womb was opened—when every thing was prepared for the expulsion of the young—that the fœtus should immediately pass through. Therefore, he would again say, do not be in too great a hurry, especially with ewes ; for very frequently labour was extremely languid. Timely assistance must, nevertheless, be afforded.

The lecturer proceeded to point out the various cases of preternatural presentation which were necessary to provide for. The position of the fœtus in a perfectly natural labour was that in which the fore legs and the head protruded simultaneously; but there were many deviations from this position, which rendered the act of delivery a matter of great difficulty, and required the greatest caution on the part of the operator. Sometimes, the head came first, whilst the fore legs were doubled up in the womb; at other times, the head was bent down or turned backwards; the fœtus being dead in other cases, the hinder part presented itself. In adjusting the head when turned backwards, the most convenient instrument to be used was a hook. Many persons entertained great prejudices against using hooks, but without reason; for they might easily be constructed in such a manner as to cause no injury to the mother. The head being got within reach, the hook should be placed within the orbit. A hook fixed to an iron rod with a joint might be used more efficiently than one attached to a line, because, being introduced together with the arm of the operator, it could be either pushed forward or drawn back by the assistant; and the operator could as readily, by means of the joint, effect an attachment to the orbit.

The lecturer next referred to a presentation which, he remarked, was a very difficult one—that where the breech presented itself with the hind legs stretched along the under part of the body of the fœtus. The object in this case is first to reverse the legs; which may be accomplished, though with some difficulty, by introducing a line by means of a rod between the thighs, and passing this around each of the legs in succession. In some few instances, delivery might be effected without having the fœtus previously adjusted; but it was always desirable to adjust the fœtus, or lessen its size by dissection. In other cases, a mechanical resistance was offered to delivery. One of these was dropsy of the belly of the fœtus. When the head and fore legs came forward readily, and still resistance took place, such frequently arose from the unnatural size of the body. In this instance the fœtus ought to be at once sacrificed; because, were it delivered alive, it could be scarcely expected to survive many days. To destroy it, a stilet in a metal sheath should be employed. The fœtus being penetrated by the stilet, the instrument should then be withdrawn from the sheath, which thus became a tube, through which a sufficient portion of the fluid would escape to diminish the size of the body, and enable the operator to withdraw the fœtus without difficulty. Another case of mechanical impediment arose from the enlarged size of the head. In this case the operator must introduce his hook with one hand, and attach it to the orbit, and with the other

operate upon the head with an instrument called a perforator, so as to reduce the size of the head to such a degree as to enable it to be drawn out without difficulty.

The lecturer next pointed out the precautions necessary for preventing inversion of the uterus. With regard to medical treatment in these cases, bleeding and physic had been recommended. If they wished speedily to sacrifice the life of the animal, such measures would be effective; but the best course would be to administer diffusive stimulants and sedatives. Nothing was so good as opium for the purpose. The Professor, after a few general observations, concluded by thanking the audience for the patience and attention with which they had listened to his lecture.

The *Hon. Mr. Wilson* proposed a vote of thanks to Professor Simonds for his able lecture; which, having been duly seconded, was put to the vote, and carried by show of hands, amidst general acclamation.

The audience then separated.

York Paper.

ASIATIC CHOLERA SUCCESSFULLY TREATED BY CHLOROFORM, GIVEN INTERNALLY.

By P. BRADY, M.R.C.S.L. & L.A.C., Harrow.

Now that well-grounded apprehensions are entertained of the return of the Eastern epidemic, whose fatal progress has hitherto baffled every effort of our art, the following case will, I presume, be regarded with much interest:—

CASE.—Mary Parratt, aged sixty, ordinarily enjoying good health, was on Saturday, the 29th ult., attacked with slight diarrhœa, for which the usual homely remedies were used. On the following morning at six o'clock A.M. the diarrhœa became profuse; excessive vomiting supervened, accompanied by spasms in the calves of the legs, fingers, and toes. Notwithstanding the urgent nature of the symptoms, reliance was still placed on the favourite remedy, brandy. Without avail, however: the dejections became incessant, the spasms increased in intensity, and at nine o'clock A.M. on Sunday, the 30th ult., I was called in to see the patient, who, it was affirmed, was in a "dying state." Believing, from the description given, that I should have to treat genuine malignant cholera, and having pre-determined, should such a case present, to try the effect of chloroform, administered internally, I took with me the following mixture:—R. Chloroform, ʒj; ol. terebinth. ʒj; aq. distill. ʒiij. M.

On my arrival I found the patient presenting all the symptoms of malignant Asiatic cholera in an advanced stage: the features collapsed and ghastly; extremities and tongue cold; burning sensation in the stomach and œsophagus; pulse rapid and scarcely perceptible; voice diminished to a whisper; stomach exceedingly irritable, and the dejections from the bowels presenting the characteristic rice-water appearance; and all the voluntary muscles of the body affected by spasm, so that the patient actually writhed in agony. I immediately administered a large tea-spoonful of the chloroform mixture (containing about six minims of chloroform and forty of turpentine) in a wine-glass of dilute brandy, and applied sinapisms to the calves of the legs and abdominal and thoracic surface. Thirst was relieved by drinking plentifully of water nearly cold. Notwithstanding the irritable state of the stomach, I had the satisfaction to find that the chloroform draught was retained, as well as the fluid drunk after it, and was followed by no dejection. I now (half an hour after the draught) gave two of the following pills:—*R.* Calomelanos, \mathfrak{D} ss; fellis bov. inspis., \mathfrak{D} j. *M.* et divide in pilulas quatuor.

In an hour after the administration of the chloroform, vomiting ensued of a portion of the fluid drunk, slightly tinged with the gall: this soon subsided; the diarrhœa had apparently ceased, and the cramp diminished in frequency and severity. I now administered a second dose of the chloroform mixture, and soon after repeated the pills. The stomach retained both; she soon felt decided relief: the pulse rose in power and became slower, the spasms less frequent; and in an hour after the second dose she was bathed from head to foot in a warm perspiration, and expressed herself comparatively free from all uneasy sensations. The attack had been completely subdued, leaving behind a good deal of pyrexia and debility, from which she is now rapidly recovering.

Remarks.—I believe it is the prevailing opinion that malignant cholera is, primarily, an affection of the mucous membrane of the alimentary canal; and in this view, its accompanying spasm, as well as the disturbance or arrest of function in the secerning organs, would be regarded as the reflex effect of irritation of the peripheral extremities of the spinal and sympathetic nerves supplying the coats of the canal.

This view of the disease, however, appears liable to many objections:—

First. On examination of the canal after death from cholera, its coats seldom present any remarkable appearance; that most frequent being thickening or corrugation of the lining membrane, which is, no doubt, the physical result of deprivation of its water,

inducing a similar change to that presented by the skin in the same disease.

Secondly. Simple diarrhœa, really depending on a subacute inflammation of the mucous lining, occasionally continues for many days, and may even proceed to a fatal issue, unaccompanied by cramp or any remarkable arrest of function in the discerning glands.

Thirdly. In Asiatic cholera the spasmodic muscular contractions occasionally precede the diarrhœa and vomiting; and,

Fourthly. The disease will occasionally terminate fatally without having presented any symptoms but those of irritation of the spinal cord, and collapse.

These facts, I think, preclude us from regarding the affection as primarily seated in the alimentary canal. It is, I conceive, more probable that the disease is produced either by a specific poison conveyed through the atmosphere and entering the blood, or by a disturbance in the electrical condition of the atmosphere, or other deviation from its normal standard, calculated to promote the generation in the blood, under favourable circumstances of predisposition, of a product which acts as a poison to the sympathetic and spinal centres. Whatever value may be set on this theory, a review of all the ascertained facts connected with the disease will, I am inclined to think, fully warrant us in regarding those nervous systems as "the peccant parts." The functions of the liver, kidneys, and salivary glands, are arrested; for, in the few cases in which urine and bile have been found after death in their proper receptacles, these fluids have, doubtless, been secreted prior to the attack, and retained by spasm of the sphincter vesicæ or gall-duct. The muscular prostration, with rapidly recurring spasm, at once refers to disease of the spinal cord. The action of the respiratory muscles is impeded, and the chest in consequence, not being duly expanded, a diminished volume of atmospheric air is inhaled at each inspiration. Carbonic acid accumulates in the blood, its homogeneity is impaired; and, the diminished organic nervous agency depriving the mucous tissue and follicles of the intestinal tract of their tone or vitality, they would appear to be transformed into passive filters of the fluids of the body.

If such be the true pathology of malignant cholera, the first indication of cure would be to administer an *antidote*; that is to say, a remedy capable of forming such a combination with the morbid product circulating through the system as would render it inert or materially modify its influence—an effect which mercury seems to produce on the syphilitic virus; but, while unacquainted with such a remedy, the next indication presenting would, obviously, be to subdue the irritable condition of the spinal nerves by remedies of a sedative character, and restore, by the use of diffu-

sible stimulants *judiciously selected*, the powers of the circulatory system, and the functions of the secerning glands. From witnessing the action of chloroform on the system during its inhalation, it appeared to me highly probable that, administered internally, it might answer both those indications, and I, therefore, determined on trying it in the first case which should present. The result, as detailed above, leads me to believe that it will be found, if not an *antidote* to the disease, at least a highly valuable auxiliary in its treatment. The rapidity with which it appeared to arrest all the symptoms, to control the vomiting and diarrhœa, to subdue the spasm, raise the pulse, and restore the temperature of the body, filled me with the most sanguine expectations of its value as a remedial agent in cholera, and probably in other diseases of a typhoid character.

The turpentine I added on account of its stimulating and diuretic properties; the ox-gall, with the view of supplying, as nearly as possible, its natural stimulus to the mucous lining of the intestinal tract; and the calomel, as a stimulus to the liver and salivary glands; but, from the very doubtful value of these adjuncts in the treatment of cholera, I am inclined to attribute my success in this case almost wholly to the action of the chloroform. In conclusion, I trust I may venture to express a hope that the profession will lose no opportunity of testing its value as a remedial agent in the treatment of this fatal disease.

Medical Times, Aug. 12, 1848.

Foreign Extracts.

Of the Clavelisation (Inoculation for Small-pox) of Flocks of Sheep viewed as a Measure of Sanitary Police.

By O. DELAFOND.

(*Third article, continued from page 469.*)

19. SOME persons of the present day are still of opinion, that, in the case of the presence of isolated enzootic or epizootic pox, inoculation is not unattended with inconvenience, whether it be practised on the grazier's account, or to serve the interests of agriculture in general.

The objections urged against clavelisation (inoculation) are—

1st. That it inflicts a disease which sheep in good health might

never, perhaps, naturally contract; and that thus it multiplies the *fomes* of contagion and the media of transmission.

2dly. That at times inoculation breeds a disease as intractable and fatal as the natural pox.

3dly. That it may turn out detrimental to the profits of graziers, by impairing the rearing, fattening, pasturing, shearing, and the vending of the sheep and their wool.

It will be easy for me to shew that none of these objections are of great weight.

20. FIRST OBJECTION: *That inoculation must prove disadvantageous, by giving animals the small-pox who otherwise would probably never have had it.* Experience up to the present time has shewn that in the case of a flock being attacked by the pox, although but a small number may have it in the first instance, the remainder are certain to become infected, and in succession at twice or thrice to contract the disease. In this both authors and veterinarians agree. While, then, on the one hand, it is clearly the interest of an individual sheep-owner, whose flock is infected with the pox, whatever may be the number that have the disease or have already had it, to cause the rest to undergo inoculation with the view of staying further loss; on the other hand, to limit the duration of the disease, to render it benignant when it would be fatal, or to continue its mild form should it have so set in, to lessen the fomes of transmission, to sequesterate, to fold for as short a time as possible the infected flock in order to diminish the media of propagation;—is this not consulting the individual as well as the general interests of all sheep-owners in the neighbourhood? Under these circumstances, it appears to me the objection in question cannot be considered of great weight.

The inoculation of flocks up to that time free from small-pox, but now from their position at home, and the vicinity and relation of other flocks to them, exposed to it, so far as regards private and public interests, is another affair altogether, and one that requires close examination.

Observation has shewn that, in every case in which one, two, or three isolated flocks are infected with the pox, if such flocks be not speedily and completely isolated by sequestration and folding, the disease soon spreads to the sheep in the neighbourhood. In localities where many sheep are bred, as well as in those where they are fatted, and particularly in places where sheep feed upon common pasturages, go along the high roads, and frequent the general watering-places, instances of contagion in the manner already pointed out are occurring every year. Thus it is that small-pox, accidental and isolated at its origin, spreads from farm to farm, from village to village, from parish to parish, until at length

it invades whole counties and districts, and spreads over a large extent of country. In the case of epizootic pox, the difficulty of establishing feeding places sufficiently distant one from another to guard against infection being transmitted through the air; to preserve them from all possibility of communication with the sheep-cote; to prevent watering at the same places with those in health; even to go along the same roads; and, above all, to guard against the clandestine sale of sheep that have been exposed, inadvertently perhaps, to certain contagion; and, besides, the difficulty, the great impossibility there is in withholding the hands of magistrates from the execution of the laws and regulations concerning the sale of such animals for slaughter, the burying their carcasses, and disinfection; the ignorance of many graziers of the importance of such measures, their carelessness, their indifference to the strict execution of such laws; all these are so many circumstances favouring the spread of the disease. If now I add, that, when the disease is left to itself, it will occupy three or four months with one flock, it will be easy to understand how it happens that contagion becomes, in general, inevitable whenever the pox prevails in an epizootic form over a large extent of country.

Such plausible reasons lead to the objection urged against the inoculation of flocks in good health, that by so doing the fomes of contagion become augmented, and the media of transmission multiplied. To me this appears a fair objection. It is incontestible that, if in any one district four flocks are attacked with the natural pox, and four others continue in health but threatened with contagion, you have the disease conveyed wherever it does not exist; it is equally certain, too, that you will have eight forms of contagion in place of four. But if we reflect for a moment, that by inoculating the animals remaining out of the four infected flocks, as well as those of the four flocks in health, we diminish the malignity of the malady, as well as weaken its contagious influence, and limit its duration to thirty days at most; if we consider that natural contagion, gaining fresh activity with every attack, may last for three or four months in each flock, and that under the supposition that one or two out of the four healthy flocks catch the disease, the contagion may not pass away in the six or eight months, or even more, out of the infected district; and if we consider that the duration of the malady will be limited in the locality where it first broke out; and, moreover, if we consider all the advantages inoculation holds forth touching the conservation of flocks, their fleeces, &c. &c., we shall spurn the idea of multiplying fomes and media of transmission through inoculation. And, besides, facts speak louder than opinions. In every place where sheep-pox has prevailed as an epizootic, and inoculation has been

practised, whether upon such animals as remain free from disease in infected flocks, or on flocks threatened with or on the point of inevitable contagion, the operation has invariably, either in one case or the other, led to the happiest results; and facts are not wanted to prove this assertion, should it be disputed.

21. SECOND OBJECTION: *Inoculation may communicate a disease as intractable and fatal as the natural pox.*—I know of no facts to prove that inoculation has occasioned mortality at all equal to natural pox.

The most unfortunate result to be found among the subjects of inoculation is that related by Lapeyrouse in 1840. By this it appeared, that out of 190 sheep inoculated, 26 went through it with perfect success; but 164 experienced gangrenous affections of the inoculated places, out of which number 25 died and 139 recovered. So that the loss was from 13 to 14 per cent.; a mortality about equal to the average consequent on epizootic natural pox. It is incumbent on me, however, to state, that this extraordinary mortality was the result of deep punctures made underneath the skin during a temperature of 26° and 27° of Reaumur (58° and 59° of Fahr.), and the prevalence of a strong oppressive south wind. And, moreover, it is worthy of remark, that about the same time the natural pox was raging in other flocks of M. Lapeyrouse, among which his loss amounted to 20 per cent. So that a very unfavourable inoculation, made at a time very unfavourable to success, did not occasion the same mortality as the natural pox.

There is no doubt but that the best inoculations may be followed by serious or gangrenous results; but such accidents become more rare as we advance, and do not now, I have authority for saying, exceed 2 per cent.

In the case of epizootic pox, the mortality is generally determined, it may be observed, by a confluent and malignant disease, and very often we are necessitated to inoculate from this pox: the result is an ill-favoured disease, which, if it be not followed by death, produces, through the violence of the febrile re-action accompanying it, abortion in pregnant ewes, suppression of the milk in those suckling, alteration in the wool, and diminution in the weight of the fleece; and, lastly, wasting away of fat sheep. I grant that these observations are just; nevertheless it is my duty to remark, that, in case we should be necessitated to take lymph from malignant pox, which is but rarely the case, we must not be deterred from inoculation. From investigations I have made concerning such inoculations, under circumstances even where many of the animals from which the lymph has been taken have died, I find that out of 2544 sheep, reckoning in the number, young lambs, sheep of different ages, ewes heavy in lamb, and old sheep, 2464

have had the natural pox, and have been cured, and 80 have died; making the rate of mortality 3 or 4 per cent. Now, such mortality as this cannot surely be compared to that occasioned by natural and confluent pox, which is 10 per cent. at least, and which, quite unlike inoculated malignant pox, occasions abortions, changes in the fleece, and wasting of flesh.

And, besides, is there no possibility of finding among the whole of the sheep attacked, one or more having a benignant pox, wherefrom lymph for inoculation may be procured? And if there happen circumstances under which the inoculation is forced from a malignant pox, these occurrences, everybody will acknowledge, are extremely rare.

I have heard several veterinary surgeons of the Somme say, that, in the epizootic pox which prevailed in that department during the hot weather of the last summer (1846), the pustular eruption amounted to no more than papulæ pale or red, isolated, indistinctly bordered, pitting, and affording no good lymph. The sheep coughed much, and discharged abundantly from the nose a yellow tenacious mucus; symptoms which indicated an acute eruptive inflammation of the respiratory passages. In this case, certain veterinarians thought of taking the mucus from the nose for inoculation, or else the sanguinolent product of improperly developed pustules; experiments which might have been followed by lamentable results.

Considering the condition of the pustules, the difficulty of obtaining good lymph, the vicissitudes of temperature, the accidents that may befall experiments of inoculation, and, lastly, a circumstance not to be forgotten, the benign form the malady in many flocks takes, many veterinarians would dissuade farmers from inoculation as dangerous and useless; though this is a case which, supposing it to be real, I look upon as rare. And, besides, I cannot understand why, among a large number of sheep attacked with the disease, one cannot meet with one or more subjects of pustules suitable for taking lymph from for inoculation, and, by propagation of it through others, procure a sufficient quantity either for immediate use or for preserving.

It has likewise been objected, that, in the case of a pox known to be epizootic, the inoculation of sheep still in good health (though coming either from a flock attacked once or twice with the pox, or from one inevitably exposed to the contagion of it, and among which consequently the disease exists in the incubative form) may be productive of violent fever, malignant secondary eruption, or other serious consequences likely to end in death. Without attempting to say whether, in reality, the introduction in succession and at different periods of two viruses into the organism would be

likely to occasion such consequences, I will grant that they might happen; at the same time I feel it my duty to remark, that they have no right to be seized upon for the purpose of casting disfavour upon inoculation. And, in point of fact, I have already shewn, in publishing the results of the inoculation of flocks throughout France, that, out of 28,533 sheep of different breeds and ages, in lamb and suckling, fat and lean sheep, and coming, as I ought not to forget, from flocks already attacked with the disease, which have been inoculated, the losses have not exceeded 1 per cent. Results such as these appear to me like a triumphant reply to the question at issue.

To resume:—if the inoculation of a malignant and fatal pox, made during hot weather, and by punctures through the skin, or under conditions unfavourable to the success of the operation, occasions no more than 13 or 14 per cent., while the natural pox would occasion a loss of 20 per cent. in the same flocks;—

If the inoculation, properly conducted, of 2544 head, consisting of very young lambs, sheep of different ages, ewes near lambing or giving suck, and old sheep, has not occasioned a loss greater than 3 or 4 per cent.;—

If, in the case of epizootic and fatal pox, the inoculation of 28,533 sheep suspected to have already taken the natural pox has not caused the death of more than about 1 per cent.;—

I think I am warranted in coming to the conclusion, that, in making a computation at the present day of the various conditions objected to for the success of inoculation, it is not possible to raise the objection that this operation transmits a pox so intractable and fatal as the natural pox.

THIRD OBJECTION: *Sheep-pox may be detrimental to the farmer's interests in so far as it operates on the breeding, rearing, fattening, feeding, sale of the animals, their shearing, and the price of their fleeces.*—I admit that inoculation, notwithstanding the disease it transmits be a benignant one, may under particular circumstances occasion serious inconveniences; I admit that its employment may delay the tupping season, by which is regulated a favourable lambing-time, and so operate against the views and interests of the breeder; it may provoke abortion; I likewise admit that the temporary disturbance of the functions may operate in retarding the development of the foetus; that during lactation it may influence the quantity and quality of the milk, and so retard the growth of the lambs, or occasion diarrhœa among them; I admit that fresh-dropped lambs may contract the pox; I admit that inoculation made at the time of the fairs at which sheep from eighteen months to two years old are sold, may postpone such

sales, and so sensibly disadvantage both the breeder and the farmer who keeps flocks, either for the purpose of manuring the land or for the butcher: neither do I dispute that this operation practised at the commencement or at the conclusion of pasturing, at the moment sheep are transferred from marshy pastures to the hills during the fine weather, may not operate both against the intentions and interests of the farmer; I do not deny but that the vicinity of mountains, woods, heaths, rivers, streams, from in a manner isolating the places in which the flocks are attacked, combined with sequestration and folding, are not preferable measures to inoculation; I hesitate not to avow that great heat as well as great cold, the usual benignity of the malady in certain situations, the breed, more or less indigenous, of the sheep of the flocks menaced with contagion, are not so many circumstances deserving to be taken into serious consideration in regard to the special interest of the farmer, as well as, on some occasions, of the general interests of a whole district, whenever this becomes a question of having recourse to inoculation. But, let me ask, what is to be done under most of the circumstances just recited? Are we to hasten or retard inoculation, keeping in view conditions unfavourable, inconvenient, or onerous to the farmer? And I repeat, that, if the situation be such as to permit conveniently of isolation of the flocks by folding or shutting up in the sheepcot, such measures to prevent contagion ought to be preferred to inoculation. Therefore it is to persons conversant in rural economy—therefore it is to veterinarians especially, to appreciate the advantages and disadvantages of operating immediately, either of advancing or retarding the contemplated inoculation, as well as to judge of its suitableness or unsuitableness.

FOURTH OBJECTION: *Expenses to be considered may be incurred by inoculation in the fees of operation.*—The costs of inoculation occasioned by *honoraria* to inoculators cannot, ought not, to run high. Under the supposition that inoculation is ordered and imposed on farmers by government authority, such charge might be fixed at so much a head. The sum of a penny a head is what is demanded by veterinarians under ordinary circumstances. This was the sum that was allowed to veterinarians by the Prefect of the Pas-de-Calais, on the occasion of the flocks being either attainted or menaced with contagion, during the time of the epizootic pox which spread through the sheep of fifty-nine parishes of this province. This sum might even be reduced to one halfpenny a head in localities where flocks are of little value, very numerous, or far distant one from another. This, then, is sufficient to shew that the expenses of inoculation are but small, and cannot operate as an objection to its employment.

To recapitulate :—I believe myself warranted in coming to the conclusion, in regard to such objections as have been made, as well to any that may be made, to inoculating flocks either attainted or menaced with contagion :—

1st. That, supposing it be true that inoculation gives the pox to animals who would not have had it naturally, such an objection is not sustainable in the case of sheep belonging to flocks already suffering in the first or second stage; experience having shewn that, under such circumstances, all the sheep of the flock take the natural pox.

2dly. That, if it be true, that, by inoculating flocks in good health, but menaced with contagion, we introduce the disease where it has never been before, and so multiply the fomes both of contagion and infection; nevertheless, clavelisation is attended with the immense advantage of circumscribing such fomes, setting limits to them, and diminishing both the amount and virulence of the contagious elements which feed them, and, in the end, of setting a period to the duration of the epizootic.

3dly. That there is no example on record of clavelisation, practised on sheep of different ages and breeds communicating a pox alarming and fatal like the natural pox; and that, in the instances of inoculation with a virus mal-selected or taken from animals having a fatal pox, the loss up to the present day has not exceeded from 3 to 4 per cent.

4thly. That inoculation made on sheep presumed already to be infected with natural pox, and under the influence of incubation, has not caused a loss rising above 2 per cent.

5thly. That it is the interest, as well as the duty, in a large majority of cases, of certain farmers of the middle orders, either to promote or delay inoculation in their flocks, and even to refuse to have it at all whenever isolation is considered sufficient to prevent contagion.

6thly, and lastly, That the expenses incurred by inoculation are trifling.

Wherefrom I have a right to conclude, that the inoculation of flocks of sheep, viewed as a matter of administrative police, is, some rare exceptions notwithstanding, an operation perfectly rational and practicable, as a means of modifying the duration of clavelous (small-pox) disease, of circumscribing its contagion, of considerably diminishing its mortality, and of dispensing with the necessity of having recourse to measures of isolation, oftentimes inconvenient and onerous to the farmers.

Recueil de Médecine Vétérinaire, July 1848.

SOME FEW OBSERVATIONS ON THE IMPORTATION OF DISEASED CATTLE, AND THE APPEARANCE AND PREVENTION OF EPIDEMICS.

By WM. ERNES, M.R.C.V.S., John-street, Dockhead.

THE Sheep Importation Bill, now under consideration in the House of Commons, induces me to make a few observations through the medium of your Journal. An honourable member accuses the alteration in the tariff and principles of free trade of having caused the introduction of a fatal disease (*variola ovina*) into this country. However true this may be in this individual case, it is not generally so. Of three hitherto unknown epizootic diseases, which have prevailed in this country within the last ten years, only one can be with any truth ascribed to free trade and free importation of cattle. In 1838 the aphthous disease (known by the scientific name of *claudicatio adamo* in Germany) made its appearance in this country, and was equally as fatal among horned cattle as, if not more so than, *variola ovina* has proved among sheep. We had no importation of cattle at that time : on the contrary, it was strongly prohibited. Pleuro-pneumonia, another most fatal disease in horned cattle, was observed, to the best of my knowledge, in Ireland, at the close of the year 1841, and for a certainty made its appearance in our metropolis in January 1842. And this was, notwithstanding the alteration in the tariff dates from the same year, from the best information obtained on the subject, *before one head of cattle had been imported into this island*; and, therefore, importation cannot be considered as the cause of the appearance of this disease in London. Both diseases, at the time, prevailed to a fatal extent on the continent. But, in my opinion, it would be preposterous to suppose that a space of somewhat more than 20 miles of water, though it may tend to check, could ultimately protect us either from epidemic or epizootic diseases. I am also of opinion that the total prohibition of the importation of sheep is a mistake. It ought to have been confined to *the diseased sheep only*. And had proper inspectors been appointed, this would have soon proved effectual, since no one would have been found to run the risk of carrying a cargo of diseased sheep : and the more so, because in all parts of the continental markets, places are set apart for affected animals ; and it is the want of such regulation existing in this country that, I am convinced, induced parties to send us our supplies from diseased markets, instead of from others. Precautions, I am sure, will not now avail. The disease, once in the country, is not to be got rid of by any alteration in the importation of cattle. Other means

must be had recourse to. The President of the Board of Trade with truth said, that the best way of checking the progress of the disease was *by inoculation*;—that every other way was found ineffectual;—that inoculation reduced the mortality to a very small amount; but that there was a prejudice among veterinary surgeons against inoculation. I am not aware that the veterinary profession has been consulted, as a body, about it, and cannot conceive on what authority this assertion was made. Professor Simonds has made experiments on inoculation, and he certainly does not seem prejudiced against it. I pointed at inoculation as the only preventive resorted to on the continent in the November number of *THE VETERINARIAN* of last year; and likewise that no good effect had resulted from vaccination, which had also been tried. On the continent, veterinary surgeons are appointed purposely to take cognizance of epizootic diseases, and to prevent their spreading; a similar course should be recommended in this country.

THE VETERINARIAN, SEPTEMBER 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

A NOVEL and striking feature presents itself in our present Number in the administration of chloroform as a medicine; and the credit of first adventuring on the employment of an agent internally which, externally used, has proved itself to be so terrifically formidable, belongs, we are proud to say, to our talented correspondent and professional brother, Mr. Mayhew. On a subject of the present and increasing importance this is likely to become, we cannot in the commencement have presented to us too many or too varied facts of a nature likely to serve as directing posts to us in our onward march of inquiry; and therefore it is that we have introduced into our "Home Extracts," from *The Medical Times*, a case from human medicine, in which Asiatic cholera was successfully treated by giving chloroform internally, by Mr. Brady, surgeon, at Harrow. This case was published on the 12th August. Mr. Mayhew's paper, which bears the date of the 5th August, was received by us on the 10th; consequently, Mr. Mayhew's experiment stands in no relationship whatever with Mr. Brady's. Quite the contrary, indeed; for, singularly enough, both

experiments appear to have been making about the same time ; and to both gentlemen, in their respective departments of scientific inquiry, is, certainly, the greatest credit due.

It will be remembered that Mr. Mayhew was early in the field as an experimenter in the days when ether had so great a name as an anæsthetic ; and that the result of some trials to which he put it in dogs and cats augured in his mind not very favourably of its probable influence on the horse, and its consequent utility in veterinary practice. Time has pretty well verified this prediction in the case of ether ; nor, as yet, in the case of chloroform as an agent to stifle feeling, has, in a practical point of view, much better success followed. For, although the anæsthetic powers of chloroform have been satisfactorily proved to be predominant over even the strength of a horse, yet is that strength likely to be so outrageously and uncontrollably manifested during the transition of the animal from consciousness to unconsciousness, in consequence of certain suffocating if not actually painful sensations experienced by him at the time, that there exists the greatest danger of him, in his delirious moments, throwing himself headlong upon the ground, and doing himself irreparable injury. Mr. Field, from the many trials he has had opportunities of putting chloroform to, is probably better able, from being better prepared, to control its effects than most of us ; and yet Mr. Field, from a conviction of the risk, not to say danger, necessarily connected with the experiment, very properly refuses, on his own responsibility at least, to subject any horse on whom he may have to operate to the influence of chloroform.

Abandoning the use of this potent chemical agent as an anæsthetic, at least for all practical purposes, let us turn our attention to it as "an internal remedy." Mr. Mayhew has pointed out to us the ground upon which we may safely make a beginning : let us, then, at once take our stand upon it, and try how much farther we may venture into so inviting a field of investigation ; one that promises so fairly, and, we think we are warranted in adding, so fruitfully.

On no occasion, from its first down to its last sitting, has the Council of the Royal College of Veterinary Surgeons met to deliberate on a question of more fundamental import, touching their

Charter, than the one submitted to them at their meeting on Friday, the 25th ult.; to give a report of which we have purposely held our printers' hands up to the very latest moment. At so late an hour, and pressed as we are, too, for "copy," we would fain excuse ourselves from entering, this month, on the discussion of this momentous question; nor, perhaps, is it needful that we should do so, since before what we are now writing can possibly meet the public eye, the point will have been debated afresh, and in all probability have been finally pronounced upon. Let us hope, therefore, in the acknowledged ability and trust-worthiness of the hands and heads in which we leave it, and confidentially leave it, that the question will receive—on Wednesday, the 30th—(or rather, as we are supposed to be writing on the 1st Sept., we may say, will have received), every further sifting it may call for, so as ultimately to come to be settled upon the best and surest foundations.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

Sitting of August 25, 1848.

(SPECIAL MEETING.)

Present,—The PRESIDENT, the SECRETARY, Messrs. FIELD, BRABY, MAYER, sen. CHERRY, sen. PEECH, PRITCHARD, SPOONER (Professor), MAYHEW, ERNES, BURLEY, F. KING, SILVESTER, PERCIVALL, HENDERSON, ARTHUR CHERRY, GOODWIN, ROBINSON, GODWIN, and JAS. TURNER.

The minutes being read and confirmed,

Mr. Field stated that Mr. Walters, who had hitherto acted as Solicitor to the Council, having tendered his resignation, he should beg leave to move that Mr. Stephen Garrard, of Suffolk-place, Pall Mall, be appointed Solicitor to the Council.

Mr. Henderson seconded the nomination, which, not being opposed, was, as a matter of course, carried.

The President then stated, that one of the most important questions which had ever come before the Council he was about to submit for their consideration, and stated that he and Mr. Field had had an interview with Mr. Dennison, M.P., one of the Governors of the Veterinary College, at which, by request of Mr. Dennison, Mr. Coulson, Solicitor to the Treasury, was present;—that, after a lengthened conversation, in which it was stated that the only desire of the Governors of the Veterinary College was an alteration in the *Bye-laws*, but leaving the Charter intact, it was arranged that

Mr. Coulson should furnish the President with a proposal in writing, for the consideration of the Council, and he now laid before them that document.

The Secretary then read the proposal sent in, which purported to be an extract from an additional or supplemental Charter granted to the Royal College of Surgeons a few years ago, and was to the effect, that no Bye-laws hereafter to be made by the Council should be valid without the sanction of the Secretary of State, and that the present Bye-laws should receive his approbation, after which no alteration could be made in them without his approval.

Mr. Godwin wished to know whether it was to be considered as an official document, as it had not the appearance of being so.

The President replied, that he considered it an official document, and one that could be inquired into and discussed.

Mr. Mayhew quite agreed in *Mr. Godwin's* question. It was a very important one, and it certainly did not come before the Council in the usual form of an official document.

Mr. Arthur Cherry took a similar view.

Mr. Jas. Turner thought that it ought to be considered as an official document, as, if it was not so at that moment, it could soon be rendered such.

Mr. Godwin said that he still was not satisfied that it was an official document.

The President explained, after which

Mr. Mayer put the question, that, as a point of law was in his opinion raised, as to how far the admission of such a clause or addition, with the addition of certain privileges to be embodied in a supplemental Charter, would interfere with the Charter already existing, whether the opinion of the Solicitor, who was waiting in another room, should be taken on this point.

A discussion ensued, during which the question was put, How was it that a new channel, supposing it to be one, was now opened? That our communications heretofore had been direct with the Home Office, and why was it now through the Solicitor to the Treasury? No reason, however, was given for this new course, and the discussion ended in the general feeling that, though the document could not be received as strictly official, it might nevertheless be taken into consideration as a proposal from the Governors of the Veterinary College, and its merits discussed.

Mr. Mayer renewed his proposition, and moved that the Solicitor's opinion be taken. It being seconded—

Mr. Ernes opposed.

Mr. Mayhew took a similar view, and moved an amendment, "That no solicitor be called in." *Mr. Ernes* seconded the amendment.

Mr. Percivall said, that the reply to the proposal now laid before him had already been given, and that it was only a renewal

of the Veterinary Board in another form;—that the granting of such powers would be tantamount to the destruction of the Charter; and for what the Charter would be worth if such a proposal was admitted it might be thrown behind the fire;—that it would place the body corporate in a complete state of subserviency, and he strongly opposed any measure which should have a tendency to infringe upon the Charter.

Mr. Pritchard was desirous of seeing an amicable arrangement of all differences; but any such measure as the one proposed to them he would strenuously oppose.

Mr. Burley wished for unanimity; but he could not admit of any interference with the power of regulating our own affairs, which interference with the bye-laws would effectually do; and he must deprecate the granting of any power of interference.

Mr. Ernes took similar views

Mr. F. King asked how far such proposed interference of the Home Secretary would affect alterations that might be deemed requisite in the present existing bye-laws; but on this point the advocates of the measure could not speak positively.

Mr. Field supported the measure, and thought that no injury to the Charter would ensue, but, on the contrary, much good would result.

The Secretary took a similar view.

Mr. Mayer took a nearly similar view.

Mr. Goodwin generally supported the measure.

Mr. Braby also supported it.

Mr. Jas. Turner said that he felt there was a desire for mediation on the part of those who had forwarded the document before them; but at the same time he could not agree to such a proposal as that now made to them.

Mr. Arthur Cherry opposed the adoption of any such measure as productive of utter destruction to the best interests of the profession: by it, though the Charter might remain intact, yet by the exercise of the veto which would be placed in the hands of the Secretary of State the whole provisions of the Charter would be completely neutralized.

Mr. Pritchard thought that so very important a subject as interference with the provisions of the Charter should not be lightly considered, and was of opinion that a general meeting should be called before any measure was adopted.

Mr. Mayhew stated that he could not consent to any such destructive power being placed in the hands of any party; that Government interference was not so harmless as many supposed. How thoroughly the medical profession was dissatisfied with the Charter of the College of Surgeons! That by a similar clause being inserted in the act of the "Art Union," by the interference of the Board of Trade, that body had lost some 5000 sub-

scribers in one year; that the statements put forth as reasons for something being conceded were erroneous; that so important a question as a proposal to interfere with the provisions of the Charter ought not to be decided without taking the sense of the profession at a general meeting.

The motion of *Mr. Mayer* and the amendment by *Mr. Mayhew* were then put. The amendment was lost, and the motion being carried,

Mr. Cherry, sen. said it would be better to reduce the question to be put to the Solicitor into writing, which being done, it, together with the document, was submitted to that gentleman.

During the period of suspense an animated discussion, or, more properly, conversation, took place, and there being a general feeling amongst the majority of the members that a question so important would be the better for a little calm reflection instead of being summarily disposed of while heated by debate,

Mr. Percivall moved, and *Mr. Ernes* seconded, "that the Meeting do now adjourn;" which was carried by a large majority.

Just as the adjournment was carried, the opinion of the Solicitor was brought in: we anticipate its publication at the adjourned meeting, and briefly state that it was adverse to the adoption of any such proposal; in consequence of which opinion, those gentlemen who were disposed to advocate the measure declared their intention of not pursuing it further.

The President begged the attention of the Meeting for a few moments: he said that he had refrained from giving utterance to his own opinions on this question, and after the free expression of opinion which he was delighted to hear, he should only say, that his opinion was adverse to the adoption of the measure, and he must congratulate those members who had detected the false nature of the proposition for their foresight.

Adjourned to the following week.

[In this meeting—the most numerous on record—the country members were particularly strong, and by far the best contested debate ensued—animated, bold, open, and undisguised, but with the entire absence of any acrimony or ill feeling.]

GENTLEMEN WHO RECEIVED THEIR DIPLOMAS FROM THE
BOARD OF EXAMINERS OF THE ROYAL COLLEGE
OF VETERINARY SURGEONS,

August 23d, 1848.

James Davy
Thomas Edwards, London
Robert Gray
Richard Smith, Acton
James Rimmell, Atcherley, Bridgenorth.

THE
VETERINARIAN.

VOL. XXI,
No. 250.

OCTOBER 1848.

Third Series,
No. 10.

IMPROVED BLINDS AND CASTRATION HOPPLES.

My dear Sir,

Hounslow, August 18, 1848.

A SHORT time since I saw what I consider to be an excellent plan for throwing and securing colts for castration: it is a very great improvement on the common cart-rope, and, I think, leaves scarcely any thing to be desired. I wished very much to prevail on the practitioner who uses these blinds and hobbles to send an account of them to THE VETERINARIAN, but I could not succeed. This gentleman has, however, allowed me to make any use of them I think proper; and I therefore beg to send you some drawings, both of the blinds and hobbles, as also an annexed description of them: should you think it desirable to insert them in THE VETERINARIAN, they are at your service.

Believe me to be, dear Sir,

Your's faithfully,

J. W. GLOAG, V.S. 11th Hussars.

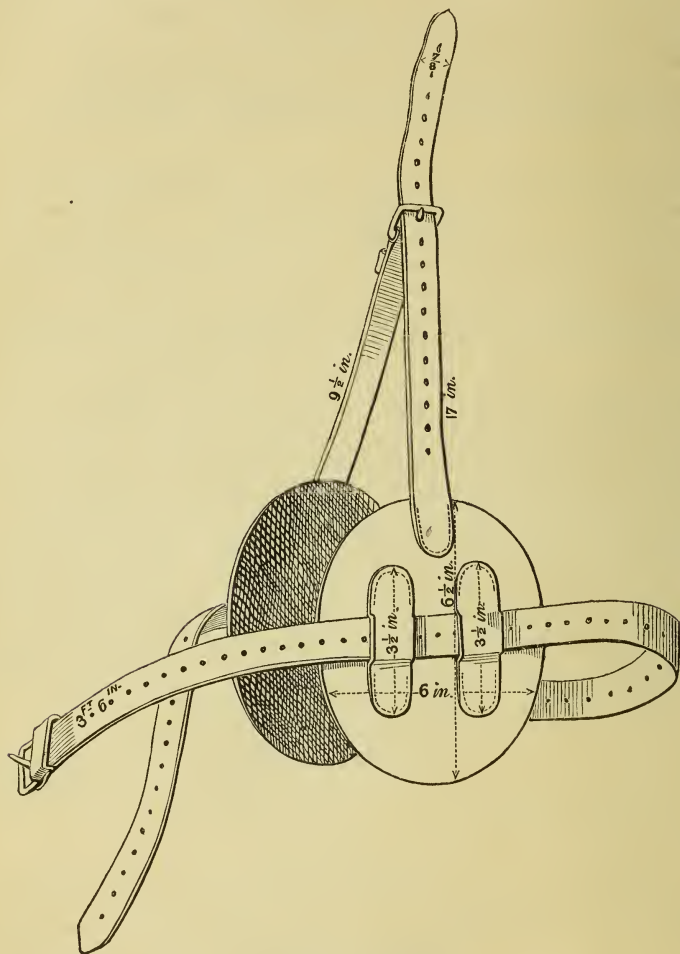
W. Percivall, Esq.,
Editor of THE VETERINARIAN.

THE BLINDS.

The construction of this article is very useful. In unruly colts it may be put on as a halter, the blinds being completely thrown off from the eyes on the sides of the cheeks, and they may remain there until required for use, when the blinds can be pushed forward in a moment: and they may, in difficult cases, be applied when, perhaps, you could not get ordinary blinds on the animal.

The Head Stall.—The upper part made with leather, and strap

and buckle to accommodate sizes, and for the convenience of putting on under difficult circumstances.



THE HOPPLES.

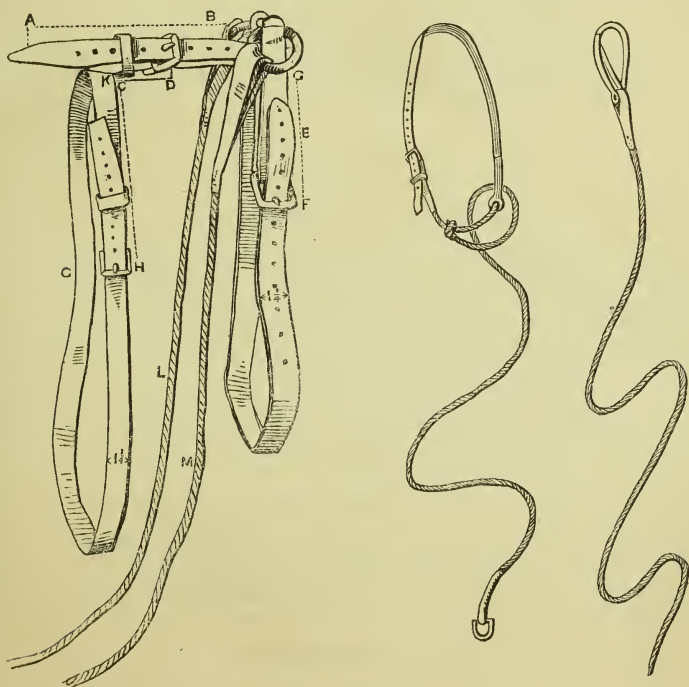
The Halter Rope has a moveable D ring at the end of it. The use of this D ring is for the purpose, in wild colts, of receiving a spring-catch which is attached to another rope, whereby the animal may be lunged or pulled about in any way; and this latter rope, by means of the spring catch, can be released in a moment, and the spare rope may be made applicable for a variety of purposes.

THE COLLAR,

Made of stout double leather, stitched. In the centre, in front of the withers, is a cottrel, which is a great improvement on the knot which, in the common method, is fixed on a doubled rope. This cottrel receives the rings attached to the ends of the pulling ropes. The ropes, being fastened by their rings to the cottrel, pass between the hind legs, and are returned through their rings. By means of this cottrel it is evident that, when the animal is secured, he may be instantly set at liberty by withdrawing the screw.

Again; there is a strap and buckle to the off side of the collar, to adapt sizes, and for the advantage of being able to place the collar without the necessity of putting it over the colt's head, and, at the same time, without any ropes being attached, which in wild colts is of no trifling importance. Attached strongly to the collar, and exactly under the cottrel, is a strap extending backwards, to be received into a buckle coming from the girth strap.

The girth strap has also a strap and buckle on the off side, for the convenience of releasing after operation, and adaptation to



sizes: a stout piece of leather is sewn to it, which ends in a buckle and receives the strap coming from the collar. This strap and buckle serves a very important purpose; it keeps the collar exactly in its place, and prevents that annoying accident not uncommon in operations, by means of the common cart-rope, with colts, namely, the rope collar, in the struggles of the animal, being forced completely out of its place or over the head; and another most essential use of this girth strap is, that, the collar being made a fixture, you have a firm pulling point from the withers instead of the shoulders, the leverage being so much greater, and the legs being brought so much more out of the way for operation. There are many other matters not directly connected with these hopples in particular which need not be entered into, such as the particular nooses and hitches for securing animals when down without interfering with the facility of instantly releasing them. A knowledge of these things is highly valuable, although the information is frequently neglected to be sought after, from being mechanical.

In the use of these hopples the halter and the blinds (with the covering for the eyes thrown backwards) may be applied; the collar and the belly girth put on and adjusted. If the animal is wild, he may be allowed to stand with these things on, or, by the assistance of the rope with the spring catch attached, he may be lunged and pulled about, and made somewhat sullen or tractable; and, lastly, when all is ready, the blinds may be instantly pushed forward, the rings secured to the collar, and the animal thrown down.

Description of the Dimensions.

Length of strap which comes from the cottrel under the centre of the collar 11 inches, breadth $1\frac{1}{2}$ inch, of double leather. This strap is received into a buckle coming from a strap from the belly-band on the back, A B.

A small piece of stout leather attached to a buckle the length of both united, measuring $3\frac{1}{2}$ inches, is strongly sewn to the centre of the girth strap, and receives the strap coming from the collar, C D.

E collar strap, made of double leather sewed, breadth $1\frac{1}{4}$ inch, total length 5 feet 3 inches: from the cottrel to the end of the buckle on the collar-strap 6 inches, F G.

G girth strap, made of single strong leather; total length 7 feet 8 inches, breadth $1\frac{1}{2}$ inch.

From centre of girth strap on the back to the end of the buckle on the girth strap, 10 inches.

L M. The ropes each 21 feet, ending in a ring $2\frac{1}{8}$ inches diameter, through which the rope is returned after passing between the hind legs.

All the ends of ropes neatly and securely fastened by means of leather sewn round them.

CHANGES IN THE NATURE AND CHARACTER OF DISEASES IN HORSES.

By VETERINARIUS.

VETERINARY SURGEONS who commenced their professional career a score or more years ago cannot fail to have made remarks in their own minds on the alterations of views and opinions which have, insensibly as it were, crept over them on the subject of disease in horses, and in particular in relation to those diseases of which the majority of horses die—the diseases of the pulmonary organs and their appurtenances. Formerly, the very name of “Inflammation of the Lungs” was the signal for immediate and copious letting of blood. What said Coleman?—“Bleeding is our *sheet anchor* in pneumonia: let the pulse be what it may, you are to bleed.” “Probably the horse will stagger and become weak, but you are not to be appalled by that; for he will become stronger and have his pulse increased in power by loss of blood. For it (the pulse) was previously debilitated by over-distention (of the artery with blood), and, therefore, you must continue the letting of blood until the pulse be actually reduced to a weak state.” “Bleed again, if you find the symptoms return.” “Give me blood-letting and the application of cold, and I will do more good than you will with all the other remedies*.”

Such was the esteemed first-rate practice of its day; and yet, were we of the present day to pursue the same line of therapeutics, I will ask any veterinary surgeon what would be the result? “Oh! but,” I think I hear somebody say, “it is now-a-days *influenza*, *epidemic fever*, *pleuro-pneumonia*, that we have to treat, and not common”—say, *former*—“inflammation of the lungs!” Was there then, in Coleman’s time, no such thing as epidemic pneumonia; or does there in ours occur no such disease as *common* inflammation of the lungs? That we hear and see a great deal more of “*influenza*,” and “*epidemic*,” and “*low fever*,” than we were wont to do years past, admits of not a question, and that inflammations of the air-passages and pulmonary structures are, in an especial manner, altered thereby in their type and tendency, is to my mind a fact quite as demonstrable. It has been the gradual and insidious manner in which this change in the nature or character of disease has crept upon us that has led to so much destructive error in the practice of veterinary medicine.

* Coleman’s Lectures.

Coleman's pupils left College persuaded that nothing but the phleam could save their pulmonic patients, and numbers of them persisted in their sanguinary practice, heedless of the *influenza* which was gathering around them, to the destruction of life to a large extent, ere their eyes became opened to their error. Others became convinced of this fault by the accounts of *influenza* and *epidemics* which, about the time, came pretty often to be published. At length a sort of paper war commenced, whether there ought to be bleeding or no bleeding in influenza; and though the advocates for blood-letting, fresh from the Coleman school, mustered so strong at the outset that they overpowered their opponents, still has time and experience proved that the Colemanites were in error.

In the class of the *bleeders* I must, as a disciple and follower of Coleman, and a great respecter of his opinions, rank myself. I pursued the practice for some years, and thought myself as successful as other veterinary surgeons. Seasons of influenza, however—when cases of *distemper in horses*, *low fever*, &c. (as they were called, though dying *pulmonic*) prevailed—at length discovered themselves to me at seasons when blood-letting was ill-borne, and during which, if persisted in, pulmonary disease sank under the use of the phleam.

At what period this “change came o’er the tenor of my dream” I cannot now precisely say. It was brought about by a conviction that remedies which once commanded success appeared no longer worthy of faith. It was true, I had got “influenza” to treat; but this influenza so often assumed the form of or ran into pneumonia, that I felt myself at a loss for marks of distinction, or rather for such signs as should warrant me in pursuing my old practice or in substituting another for it. I consulted old authors and writers on the subject. I read influenza under the name of “fever” and “distemper” to have been, even in their time, the same disease. I then came to the conclusion that, instead of there being change in the nature or character of the disease, the alteration lay in its comparative prevalence; and that this must be owing either to certain atmospheric changes about which we know little or nothing, or else to some alteration in horses’ constitutions, of which, however, we possess no proof. Now-a-days, *influenzæ*, instead of occurring “spring and fall” as formerly, make visits at irregular and unseasonable periods.—Nay! hardly do we see now any pulmonic attack which we can treat with the same depletory measures as formerly, and which consequently we are apt to regard as partaking more or less of the nature of influenza. The inflammatory action we have to treat would appear to be of the asthenic in place of (as formerly) the sthenic character; and this I believe to arise from

pneumonia existing in a system under the influence of influenza—whatever that influence be—instead of existing in a normal or uninfluenced state of system. Whether this be the interpretation of a series of facts in horse medicine which we think “nobody will deny,” certain it is that our phleams and lancets, which once on a time were ever in our hands ready for execution, now absolutely rust in our pockets or upon the shelf in our surgery, for want of use. And as for pins, were it not that they now and then turn out useful for a twisted suture, we seem no longer to have any demand for them in a disease which once proved the occasion of their greatest consumption.

What would Coleman say to all this, could he rise out of his tomb and behold such changes? Would he believe that pneumonia or pleuro-pneumonia could be successfully combated without blood-letting? One thing, probably, he would teach us as connected with the change; and that is, that the *virus* or contamination of influenza pervaded the mass of blood, and that through such change of property in the vital fluid it was that the character and tendency of disease became so vastly and remarkably altered.

ABSCESS OF THE BRAIN.

By J. W. GLOAG, V.S. 11th Hussars.

I HAD a curious case a few days since. One of our officers bought a thorough-bred horse in Ireland about five months since. The animal was then in very poor condition, which was accounted for by having been taken out of training. He remained in this poor condition, although on the best keep, until about three weeks since, when he was broken in for light harness in London. Great excitement and fever was brought on during this breaking, and the animal was dangerously ill for some days. He was then sent to Hounslow, and came under my notice: he was at this time recovered from the last attack, but was very thin, and looked dull and mopish. He was put into a loose box, and had a good groom, and every attention in the way of diet; linseed, scalded oats, carrots, &c. &c. The animal, although feeding very well, pined away visibly daily, and I was quite at a loss how to account for it, as the dung was natural, &c. The horse also quickly lost strength and energy, but had no feverish symptoms, but rather a depression of vital power.

On Sunday the 3d, I looked into the box to see the horse, and

walked straight up to him on the near side; and, when I laid my hand upon him, gave a sudden start and tremor, as if he had not seen my approach, although he was in a spacious airy box. I turned him round and examined his eyes, and found he had very defective vision of the near eye. The pupil of that eye contracted very imperfectly in the light, and on bringing him out of the door he evidently shewed he could only see very little with the near eye, by his being afraid of the doorway, &c. No other particular change had occurred in the animal. The dung was soft, the animal fed well, &c. I told these circumstances to the owner about the loss of sight, adding my opinion that it proceeded from some organic affection of the brain. Many of the officers came to see the horse, and I was nearly laughed out of my opinion that any thing was wrong with his brain, as they could see very little amiss with him. However, I gave the horse a dose of physic, and resolved to watch him very closely. Monday, the physic acted; no change in the animal. On Tuesday, the animal looked brighter, and, I thought, saw better; he was well inclined for food, and nothing further unusual.

Wednesday morning I was looking through a hole into the box where the horse was, when I perceived that he was hanging his head a great deal, and that his eyes were half closed, and I was beginning to "smell a rat," when the horse walked round the box and went with his head straight against the manger. I then went into the box and scrutinized him very closely, and sure enough I found he could not see from either eye—that both his eyes were perfectly insensible to light. It was not a case of distended pupil; the pupils were of the natural size in the stable, but did not diminish in the slightest degree with light, and the finger might be put into either eye before the horse was conscious of it. Taking into consideration the state of the bowels, which was quite loose—the horse only having had mashes—and all the previous circumstances, I came at once to the conclusion that organic disease of brain was the source of mischief, and that his case was hopeless. However, something must be done. I took six quarts of blood at 11 o'clock, A.M. The blood was thin and of good colour. At 2 o'clock, P.M. I found the pulse 34; the animal hanging the head, and beginning to bore against the wall. I applied a large blister to the poll and over the forehead. At 4 o'clock, P.M. weakness had very much increased; boring forward with the head; slow pulse, 25; staggers about on attempting to move; sight totally gone; weakness increasing momentarily, and insensibly boring forward with the head. In staggers I had frequently seen good effect from the dash of cold water from a bucket at the head in restoring consciousness, and I now tried it. It had a momentary effect, and made the animal

gasp. I repeated this several times; the weakness, however, quickly increased, and the animal fell at half past six o'clock, P.M. He lay very quiet on the ground for some time, and appeared to get weaker, and died during the night, having never been able to rise or scarcely to raise his head, and, several hours before death, only able to move his legs, in consequence of having become paralyzed.

Post-mortem examination.—Lungs perfectly healthy; the right lobe filled with black blood (the side on which he lay). Bowels very healthy, and contents quite fluid; bladder full of urine. I took the head away, sawed off at the third cervical vertebra, for especial examination. In lifting off the bony covering of the brain, a quantity of matter gushed out from the right hemisphere of it. On careful examination, I found a sac or abscess perfectly organized within the substance of the brain, directly under its investing tunics, about the size of a hen's egg, full of pus, in the superior part of the right lobe of the cerebrum, which I had inadvertently touched with the saw. I was very pleased to see it, as the cause of death was so perfectly satisfactory. The near eye was first affected. The abscess is in the off or right hemisphere. This was caused, I supposed, by the decussation of the optic nerves. From the organized condition of the abscess, I have no doubt it had been forming for many months, though, most likely, putting the horse in harness excited fresh action in the brain, and brought about the catastrophe. The abstraction of blood evidently hastened death.

REMARKS ON REGISTRATION AND UNCERTIFICATED PRACTITIONERS.

By T. JONES, M.R.C.V.S.

Sir,—I HOPE that you will pardon me the liberty I take in writing to you, particularly as I am at present out of the profession, being in the capacity of traveller to a company of wholesale druggists; an occupation that brings me in connexion with an immense number of veterinary practitioners, and, as a matter of course, veterinary affairs form one of the principal topics of conversation. To the subject of registration my attention has repeatedly been drawn, but more especially of late, on account of a letter which appeared in the last Number of THE VETERINARIAN from the able pen of Mr. Arthur Cherry. I, in common with many others, consider that production no less creditable to himself than ser-

viceable to the profession at large ; inasmuch as it has already healed many an angry sore, and is one step in the right course towards putting a stop to the feud and strife for which the veterinary profession has of late been proverbial. Mr. Cherry will in future be looked up to as a man in whom the profession may safely repose the most implicit confidence. The sentiments of such a man will always have their proper weight, and be productive of real good ; whilst those of the prejudiced, who indulge in uncalled-for remarks upon uncertificated practitioners, are calculated to do much harm to the cause they attempt to advocate. When I say “ uncertificated practitioners,” I do not allude to the quacks and unprincipled pretenders with whom some would fainly confound them. But I allude principally to that numerous, practical, and generally talented class who have served apprenticeships, and attended the Veterinary College, but have never offered themselves at the Examiners’ board, for reasons that did not depend so much upon themselves as upon the bad system then existing at the St. Pancras School. Now, this class of practitioners, who, as Mr. Cherry justly observes, “ want but the form to place them on a par with the best of us, and whose addition to our body corporate would do honour to it,” ought to be looked upon as victims of a past bad system ; and, as such, are entitled to the same indulgence and favourable consideration at the hands of the Council as was received by those who practised medicine prior to the Apothecaries’ Act receiving the sanction of the legislature. If the same just principle be now acted upon, the profession may rest assured of the co-operation of those who would much rather impart their professional knowledge through the medium of *THE VETERINARIAN*, than have to contend with their neighbours in the shape of paper-wars : a conflict, however unpleasant, which would undoubtedly take place in all parts of the kingdom, and which would break out afresh at intervals, until at length the public would become disgusted with both parties. That registration is absolutely requisite all parties agree : but it is hoped that such will be carried out in a manner calculated not to bring any parties into collision ; otherwise, many, who recommend a proceeding hitherto unprecedented, may have occasion to regret what they now so rashly advocate.

The all importance of the subject may be, I hope, a sufficient excuse for my trespassing so much on your valuable columns.

I am, Sir,

Your very obedient servant.

Walsall, Sept. 12, 1848.

FRACTURED LIMBS OF HORSES.

By JOHN NELSON, V.S., *Highfield, Sheffield.*

[Continued from the last Number, page 506.]

CASE IV, *July 5, 1838.*—Mrs. Dungworth, Worlow Hall, near Sheffield, desired me to see a horse that was “lame.” I accordingly went; and, on examining the near fore leg, found that there was a fracture about the middle of the humerus. I was informed that the horse had been kicked on the part about a month ago; but, not becoming very lame, he had been worked almost all the time since; and had that morning been to Sheffield, a distance of five miles, for manure, without going lame; when, being turned into the homestead, the horse suddenly fell, and could not use his leg afterwards. The horse being aged, I advised them to destroy him, which was done, but I did not take out the bone.

CASE V, *Oct. 14, 1843.*—Mr. Sidney Oldall, Coal Aston, near Sheffield, wished me to see an aged mare, which the messenger informed me was “lame from falling down in the field while at plough,” and that they had had “much trouble to get her home.” I went with the messenger, and on my arrival found the mare standing apparently as though nothing was the matter; but on attempting to turn her in the bail stall, either to the right or left, it was quite clear that all motive power was lost in the posterior extremities, for she would have fallen down with the least movement. I then pricked her with a pin on the back from the tail forward, but she shewed no symptoms of feeling until it came about to the commencement of the dorsal vertebræ. Pulse was 60, and tolerably full. I inquired if the mare had been thrown down, or put to any extra exertion the last few days; when Mr. Oldall informed me that she had not; but that three nights ago, when she was in the pasture, an entire horse broke over the fence to her, and she had been much teased by him in the course of the night; but nevertheless, said the owner, “she has done her work as usual since.” I informed Mr. Oldall that I believed the mare’s back was broken; that some part of the lumbar vertebræ had been fractured the night the entire horse got to her; and that the fragments of bone had very likely divided in the act of turning at the ends of the lands while ploughing. I told Mr. Oldall that I thought the mare had better be destroyed. To this, however, he would not agree, she being a great favourite. I therefore put her into slings, and applied the usual remedies for five weeks, at the end

of which, there being no improvement, he consented to have her destroyed.

Examination after death.—After removing the contents of the abdomen, and examining the lumbar region, there appeared an enlargement of the first and second lumbar vertebræ, to the extent of three inches, and half an inch in thickness, arising from bony matter having been deposited. The diseased part, with three inches of the sound parts on each side, were carefully taken out, and the spinal cord examined: this likewise, after the bones had been carefully cleaned, proved enlarged opposite the part diseased of the bone. The first lumbar vertebra was found to be fractured from the middle of the articulating surface to half the length of the body of the bone; and the fracture had been cased over with bony matter to the thickness of half an inch.

CASE VI. *Aug.* 1847.—I was desired to see a mare belonging to Mr. Moulson, College-street, Rotherham, which was “lame.” On examination I found the radius fractured about the middle of the bone. Inquiring into the case, the owner informed me the mare had been lame about a fortnight, and had been running in the field, but was found to be much lamer the day I saw her. On examining the limb, I perceived the mare had been kicked on the inside of the arm. The wound, though small, was scarcely healed. She was destroyed, but I did not examine the bone.

CASE VII. *June 24th*, 1848.—Mr. Joseph Nicholson, Shire Green, at the Sheffield Park Farm, desired me to see a cow which was “lame.” On examination I found the tibia fractured about six or seven inches above the hock joint. Inquiring into the case, I was told that four days ago the cow was kicked on the part by a pony. The kick had made a small wound from which was discharged at the time a few drops of blood; the cow, however, evincing not the least lameness, no notice was taken of the injury until this morning, when, while turning her out along with four others into the pasture, one of the other cows made a push at her, and she, in making an attempt to get out of her way, broke her thigh at the very place where it had been kicked four days ago. I had the cow put into the house, but, having nothing with me for a fractured bone, I inquired of the farm bailiff if he had any old leather backbands or collar neckings. He brought me a piece of old necking. I cut two leather splints, about twelve inches long, and five or six inches wide. I then bound up the fractured parts with cotton bandages for about fifteen inches in length. Next I applied the two leather splints, one on each side, bandaging them through their whole length. I ordered the bandages to be kept constantly moist with warm water, and the

cow not to be moved on any account until she moved by herself, and to be milked when she was found up, but never to force her up to be milked; in fact, that she was to have her own way in every thing. The bandages and splints were continued on the fracture for nine weeks, at the expiration of which time they were taken off, and the cow turned out to pasture, perfectly sound: the bailiff remarked what a little trouble she had given.

CASE VIII. 1841. — Mr. Wm. Greaves, gardener to Mrs. Brownill, Newfield Green, near Sheffield, was firing off a gun, as he thought, in a perpendicular direction: the gun punched, and hurt his shoulder. In a little while the pain that he had felt subsided, and he experienced but little of it, except at one time when wheeling a loaded wheelbarrow, and at another while whetting a scythe with a stone. Three weeks after the occurrence, while ringing a pig, the clavicle divided, one end of the fracture almost coming through the skin.

Mr. Editor,—Sir, The whole of the cases I have sent you only go to prove the truth of the old proverb, that “a stitch in time saves nine;” and yet, in these cases, had that proverb been acted on, we might truly have said that ninety-nine would have been saved instead of nine. More cases of the kind could be added; but I doubt lest that your pages have been already trespassed upon too much on this subject, so shall subscribe myself,
Your's respectfully.

Sept. 14th, 1848.

FRACTURE OF THE CARTILAGE OF THE FOOT.

By T. W. GOWING, M.R.C.V.S., Camden-town.

ON looking over my case book, I find there recorded some conditions of disease which do not appear to have been generally noticed; and from these I am tempted to make a few extracts, in the hope that they may prove acceptable to the readers of THE VETERINARIAN.

In the month of April I was requested to see a bay horse, the property of Messrs. Chaplin and Horne, which had been injured by one of the railway trucks coming in contact with the foot. Excessive lameness was the result, and the usual stable remedies for such an accident had been employed, without, in the opinion of those who used them, producing much benefit; for abscess after

abscess formed around the coronary surface, and, not being properly attended to, there soon were leading from and to them numerous sinuses. I gave it as my opinion that there probably was deep-seated fracture, but of what nature I did not pretend to say; and my treatment was, in some measure, regulated by this conviction. The superficial sinuses were laid freely open with a bistoury, as recommended by Mr. Mayhew, and the benefit produced from such surgical treatment was soon shewn by the altered appearances which the wounds put on. The healing process was soon brought about, and as more abscesses formed they were treated in the like manner. In about five or six weeks from the time when I was first called in, all the wounds were healed, but the animal remained excessively lame. I recommended further time to be allowed, as I was in hopes the animal might still become useful; but, the proprietor being tired of seeing the horse in the stable, and impatient because of the loss of its services, ordered it to be slaughtered.

On examining the injured limb after death, I found the lateral cartilages ossified, and the outer one divided into two portions by a perpendicular fracture, and the posterior half perfectly detached from the coffin-bone of the near fore foot. Nature, however, had been labouring to restore the parts. Temporary callus was already formed, and a considerable portion of it converted into bone. Had the time I sought to obtain for the animal been granted, I have no hesitation in asserting the horse would have ultimately recovered. But, at the same time, I do not deny I was ignorant as to the real nature of the case, and my treatment, consequently, was rather directed by the symptoms than guided by any idea as to the precise locality of the injury in which they took their rise. The post-mortem examination, however, gave me the information I wanted, and three months did not elapse before I had an opportunity of applying the knowledge I thereby obtained.

CASE II.—In July, I was requested to look at a brown horse of the light cart breed, reported to have met with an accident. The animal had fallen down, and with the opposite leg had struck the off hind foot, producing only a slight abrasion. When brought to me the horse was exceedingly lame, and all I could discover upon examination was a small superficial wound upon the coronary surface, such as is ordinarily produced by what is termed “cutting.”

The injury not being sufficient to account for such an amount of lameness, I was led to a more minute examination, when I pronounced that there was decided fracture of the cartilage. The horse was sent home, and to the managing gentleman of the establishment I reported that the case was likely to be a troublesome one. He requested me to do what I deemed necessary, and con-

sented that time should be allowed for the recovery. There being considerable contusion about the part, poultices were ordered to be applied ; when in the course of a few days abscesses shewed themselves, as in the former case, and they were treated precisely in the same manner, by slitting them up with a bistoury, and cutting through the plexus of coronary veins. A great deal of hemorrhage followed, but this was readily stopped by compress. On removing the bandage next day, and exploring the cavities with the finger, I could distinctly feel the motion of the fractured substance. Thinking that exfoliation was likely to ensue, and that a portion of the bone would be cast off, the wounds were dressed with the intention of keeping them open ; but granulations were speedily thrown out, and the healing process thus quickly brought about. All the external wounds closed. The patient was ordered now to be kept quiet, and not allowed any exercise, although he was much improved in his lameness. In about three or four weeks he was turned out in a paddock, and in the course of a short time shewed great amendment, going nearly sound. I then examined him, and found that there was a considerable enlargement produced by a deposition of bony matter, which, no doubt, had brought about a union of the parts. The horse being so much better, he was now ordered by the proprietor to be turned out a second time at Willesdon, a distance of some miles, and when he was again taken up was put to work. In this last case there was no doubt as to the fracture. The separated bone yielded to pressure, and the manner of the restoration confirms the fact. Had I not, however, been instructed by the previous post-mortem inquiry, I should not have been led to suspect or look for such a lesion. I must nevertheless conclude that accidents of this description are not so rare as the little notice which has been taken of them might suggest. When we remember how exposed the cartilages are by their position, and also recollect that they are frequently converted into actual bone, as brittle and as unyielding as that of other parts, the possibility and probability of their being fractured are apparent. As I do not know that any cases of this kind are reported, although I cannot think they are of rare occurrence, I have ventured to place the above narrative before you, anticipating that it will afford an explanation to some of those lamenesses which, especially in heavy horses, too frequently baffle the skill of the practitioner.

OBSTINATE AND DANGEROUS CONSTIPATION, WITH
SYMPTOMS SIMULATING "GRIPEs," UNRELIEVED BY
ETHER, OPIUM, ALOES, TOBACCO, AND CHLORO-
FORM; AT LENGTH APPARENTLY REMOVED BY
CALOMEL AND OPIUM.

By WM. PERCIVALL, *M.R.C.S.*,
Veterinary Surgeon 1st Life Guards.

Sept. 13, 1848.—A BLACK troop horse, twelve years of age, was attacked while on guard at the Horse Guards with symptoms of "gripes." He was immediately sent to Hyde Park barracks. He was a known crib-biter, and had the appearance of having distended his bowels with wind, although it was said he had not been standing without his "neck-strap." On his arrival, a common soap and water clyster and some additional exercise was given him, the attack appearing nothing more than colicky pains brought on by a tympanitic condition of the abdomen. No relief ensuing, he was back-raked, without any dung being found, however; and therefore, at seven o'clock on the same evening, was given to him,

Decoct. aloes C.	3iv (containing 3iv of Barbadoes aloes)
Ether. sulphuric,	
Tinct. opii, aa	3iiss
Aq. tepid.....	Oiss. M.

This lulled his pain, and he continued quiet until nine o'clock; when he became again restless, lying down, and rolling over upon his back, and speedily rising again, and walking round his box, with a countenance expressive of sharp pain, of which he indicated the situation by looking ever and anon back at his belly. The pulse so far, however, from indicating colic or enteritic disease, was extraordinarily *full*, and about 60. He had now given to him,

Ether sulphuric.....	3vi
Tinct. opii	3iv
Decoct. aloes C.	3ij
Aq. tepid	Oij. M.

This likewise failed in affording relief, and in consequence, an hour afterwards,

At 10 o'clock P.M.—The fumes of tobacco were administered *per anum*. This brought away five or six dung-balls, of a light yellow colour, and slimy, from which he evidently felt relief; and no further indication of acute pain occurred until

1 o'clock A.M. of the 14th,—When a return of the symptoms shewing themselves, fourteen pounds of blood were abstracted, and the following drink given:—

Ether sulphuric.....	ʒiv
Tinct. opii	ʒij
Decoct. aloes C.....	ʒij
Aq. tepid.....	Oij M.

An hour after these remedies had been administered he experienced remission of his pain, and continued tolerably quiet until

10 o'clock A. M., when the pains returned again. Another tobacco enema was now given; mustard and ammonia embrocation to the abdomen. The result of the enema was the issue of three or four dung-balls of the same light colour and soft consistence as the last.

At noon.—Being desirous of ascertaining the state of the bladder, but sparing evacuations of urine having been observed, back-raking was again had recourse to; still, however, without any good result, save that the bladder was ascertained to be contracted into a globe not larger than a cricket-ball. The mustard embrocation was repeated, and likewise the tobacco enema.

At 2 o'clock P. M., finding my patient, after all that had been done to relieve him, in a state beginning to create alarm, I made up my mind, after what I had learnt from Mr. Mayhew's experiment, to test chloroform on him. We gave him at once one ounce by weight of chloroform mingled with half a pint of olive oil. He took the drench without spilling a drop. For some considerable time after his taking it, I kept watch on him; but I could perceive no other result save that he moved his jaws about more than before, and appeared fonder than ever of immersing his nose in a pailful of cold water which was kept suspended in one corner of his box.

At 7 o'clock P. M., I perceived him slavering at the mouth, and once, while standing close by him, I heard him distinctly *hiccup*, though I could not discover that anybody in attendance had heard the same sound. There was no remission, however, of his pain. I left him at three o'clock pawing with one fore foot, and he was still pawing.

15th.—Has passed a restless night, and is still in pain. And he begins now to look hollow and ghastly about the eyes, and altogether exhibits to us a melancholy picture of pain and distress, which all that we have done has failed in relieving.

About 11 o'clock to-day, Mr. Gloag, the veterinary surgeon of the 11th Hussars, opportunely looked in upon me. I related to him the particulars of my sad case, and begged his kind aid. He thought with me, "nothing could save the patient;" and yet, he said, it would be worth while to give calomel and opium a trial. Such being so favourite a remedy of my own, I readily acquiesced in his suggestion, and had the following ball made up, which was given about noon, and was to be repeated every four hours:—

Hydrarg. chlorid.....	3j
Opii pulv.....	gr. x.
Pulv. gentian,	
Pulv. zingib. aa	3ij
Terebinth. vulg. q. s. ut f. bol.	

16th.—Last night, at ten o'clock, I left my patient with little hopes of seeing him alive this morning: at seven o'clock, however, I received a message that the horse was not only alive, but was "better," he having had an hour before *a brisk purgation*. Of course, all medicine was discontinued. He had taken *five balls*—five drachms of calomel, combined with fifty grains of opium; and eighteen hours after the exhibition of the first dose purgation had come on; and from that time to the present—the 18th September—the animal has been purging moderately, without having had any very large evacuations, although fecal matter, one would think, must have been long pent up. To-day, at noon, for the first time his dung is becoming of the pultaceous character, characterised from healthy dung only in having a sour offensive odour.

So great a friend to calomel and opium practice as I have now become, I must confess I ascribe this horse's recovery to it; and for the suggestion at the moment I hold myself indebted to Mr. Gloag. Whether or no, in cases of the description of this one, we should be warranted in having recourse to it *at once*, after our boasted antispasmodics had failed to afford relief, I hardly dare say. The subject of the present case took 12 drachms of aloes, 12 ounces of sulphuric ether, 8 ounces of laudanum, 1 ounce of chloroform, and half a pint of olive oil, besides experiencing the fumes of 6 ounces of the strongest tobacco, before calomel and opium were exhibited; nor did he evince any signs of action of his bowels, containing all this medicine, before the latter had been for some hours administered.

COMPARATIVE PATHOLOGY,

ELUCIDATED BY INJECTION OF COLD WATER INTO THE UTERUS.

By EDWARD MAYHEW, *M.R.C.V.S., Spring-street,
Westbourne-terrace.*

To the Editor of "The Veterinarian."

Sir,—COMPARATIVE anatomy is a recognised branch of the medical science that has been long pursued, and which, if not perfected, is evidently progressing towards perfection. The advantages derived from such study are universally acknowledged, so that to be in some measure acquainted with it, may almost be said to constitute a proof of a liberal education. It is strange, however, that another branch of science no less instructive in its disclosures, and

certainly more immediate in its application, appears to have received no attention, and, save to a few, is scarcely recognised by name. I allude to comparative pathology, which, were the proper steps taken to arrange and classify the facts already ascertained, might be valuable to the dearest interest of mankind. To study the disease of and to investigate the action of medicines upon animals, is at present only the duty of veterinary surgeons, and the results they obtain are too generally regarded as curiosities calculated to amuse, but not fitted to instruct. No serious attention is paid to the development of veterinary science, but it is left to a class of men whose numbers are comparatively few, and whose information is unheeded. The works of the human medical profession abound in assertions concerning the lower creatures, which, though announced as the results of experiments, are too frequently of a kind which he who has been accustomed to treat the disorders of animals reads with surprise and regrets as falsities.

Sincerely do I regret this circumstance; I wish there was a more close connexion between the veterinary and the medical professions. The two never could be confounded; but, were there a more easy means of communication established, I think that which is really knowledge would be increased, and society would be proportionably benefited. To bring about the union of, or rather to lessen the space which at present seems to divide, two orders that ought not to be absolute strangers to one another, has always been my desire. When I state this, I do not pretend to conceal that, could the thing be done, the veterinary profession would be advantaged. The object sought by its members would be elevated, and, of course, the members would be proportionably raised. This is self-evident, but from this I do not anticipate the higher order would suffer the slightest degradation. On the contrary, as patronage in any shape, next to actual possession, gives importance, it seems reasonable that, in this instance, a proof of station would be established, which in the eyes of the public could not be without its effect. As the assistants, not the equals, of the surgeon and physician, I wish to see veterinary students recognised. Only in the zeal for knowledge would I have them united, and in their labours I would place the veterinary profession secondary. It is not for rank, but for the power to be useful, that I plead; and to me it does appear extraordinary that the possibility of such power existing has not been more seriously considered.

Without pursuing further these remarks, I will here attempt to shew that we do occasionally meet with cases, and are, as it were by circumstances, forced to employ treatment that might be suggestive of measures calculated to alleviate human suffering. About two years ago, a member of our profession, who had been my pupil,

called on me, and requested me to be present at an operation which he was that afternoon going to perform upon a dog. Of course I was at his command; and when I reached his house, he told me the case was one of polypus in the vagina, and he had resolved to remove the growth. The animal being produced, I examined it, and detected that the uterus was inverted and protruding. The bitch for some few days had been placed in a hayloft, and the displaced viscus exhibited an appearance which disheartened me. The mucous membrane was covered with dirt, and in many parts excoriated; numerous little nodules, varying in size from a pin's head to a horse-bean, were upon it. These were clearly exudations of lymph, and were hard, being discoloured on their surfaces. There was some sign of inflammation, but nothing of an acute kind, and the health of the bitch seemed not to be much affected.

I saw no chance of success; the organ had been so largely injured, and so long exposed, that, even if it were returned, I feared the after consequences. The powers of the part I thought must have been weakened, or, if not, there was so much to repair, that I could not hope the issue would be favourable. This was stated, and in reply my friend assured me he looked upon it only as an experimental case; and concluded with a request I would do what I pleased, he being prepared to abide by the result. Flattered by the confidence thus expressed, I nevertheless was dubious whether I should proceed. There seemed to be no chance of doing good, and we dislike to be concerned where failure stares us in the face.

At length I mustered resolution, and in despair I consented to conduct the case. The history was now for the first time told. The proprietor of the animal, though not a captious or unkind man, rising one morning with the stomach probably a little out of order, kicked the poor dog in the flank. The blow seemed slight to him who gave it, but shortly after something red was seen to present itself behind. This red novelty not being withdrawn, the injured beast was sent to my friend for treatment; and he, having kept it a day or two, had formed the opinion and come to the resolution which has been narrated.

The case is curious. I know of no similar instance in which the unimpregnated womb of the bitch has from such a cause been inverted; but dogs are curious creatures, and deep is the ignorance of man concerning them. No animal is so much abused, and no brute so often killed by those who volunteer to cure it.

I began by having a soft clean cloth spread upon a table, and, placing the dog on this, with a sponge the uterus was gently moistened. No friction was employed, but with tepid water the part was carefully sopped. This process was not quick. An hour and

a half expired before all the extraneous matter was by it removed. This accomplished, with a pair of scissors the fibrinous tumours were snipped off. The hemorrhage was trivial; but there yet remained marks of bruises and signs of laceration which could not be cut away. To these a spirituous solution of nitric acid—a drachm to the ounce—was applied, and the entire of the exposed surface dressed with it.

Knowing the peculiar form of the passage, I was able to return the womb, and met with little obstruction. Up to this point I had succeeded better than at first I hoped; but here came the difficulty. The uterus was replaced, but how was it to be retained? The irritability of the system would have a natural tendency to reject the viscus, and the lotion I had used was not of a soothing quality. To render the case more desperate, there was the knowledge of the temperament and habits of the animal—its manner of sitting—its mode of curving the spine to void its feces—the marked excitability of its generative organs—and its peculiar sensitiveness to suffering.

To own the truth, I had done so much more than, seeing the hardened and lacerated condition of the parts I had in the first instance anticipated was possible, that I was not exactly prepared for my good fortune. I remained for some time thinking, and, really puzzled, requested those present not to speak. I wanted some combination of medicine which I could not satisfactorily procure. A sedative to the general system was required, but not one that should depress; as, after operations of this description, the vital powers are disposed to sink, and therefore generally require to be stimulated. I moreover wanted an excitant to the uterus. Many things were hastily thought of, and as quickly rejected; and, in my difficulty, I was at last obliged to ask advice of those about me. A bandage or harness to pass over the parts was suggested; but the almost impossibility of fixing it properly, and the mischievous ingenuity the dog exhibits with its teeth, rendered this plan obviously inappropriate. One person proposed to adopt the custom—sometimes, I am sorry to say, followed by cow-leeches—of passing stitches through the labia. The brutal and unjustifiable practice was of course rejected, and, I trust, by the members of the veterinary profession it is never embraced.

Fairly at my wits' end, I suddenly determined to try how the injection of cold water into the uterus would act. I knew of no case in which this agent had been employed, and could not feel confidence concerning the consequences of the experiment, but, in despair, I resolved to hazard it. A quantity fresh from the pump was therefore obtained, and it was thrown up, being allowed to flow back. A stream of cold water was thus made to pass over

the interior of the uterus, and about two quarts had been used before the animal appeared to be at all affected, excepting that the injection seemed to induce a sensation of discomfort. At last a feeble moan was uttered, which, when another pint or thereabouts had been injected, burst into something approaching to a cry. I then desisted. The tube was withdrawn, and, hoping that the symptom of pain resulted from the contraction of the organic fibre under the stimulating effects of the cold, the animal was ordered to be placed where nothing could disturb it.

Having passed an hour in the company of my friend, when about to leave I requested to see the dog once more. The animal had been put into a hayloft, and I was pleasantly surprised to hear it give tongue on our approach: it came to meet us, and the change was such as I could not have anticipated. The parts had regained almost their natural appearance; certainly they presented nothing to indicate the aspect they had exhibited only a few hours before.

A mild aperient was given. The animal had no other medicine, neither was any local application used. For three days a slight discharge of a blackish colour was poured out; but then this stopped, and the animal was returned to its owner cured.

This case to me appears to be important: it seems to indicate that we have at our command an agent which is powerful in its action, and always to be procured. Judging from the operation of cold water in this instance, it seems to be as harmless as it is active. Its influence over the uterus has long been known, but it has hitherto been employed only as an external application. To bring it into direct contact with an organ so sensitive as the womb appears to be a violent measure, from which the feeling revolts. I do not wonder that in human practice it has not been resorted to; but, when we reason on the matter, many of the objections which at first oppose its employment are dispelled. There is in the body no organ gifted with such ability to endure as this, for it survives that violence which no other could sustain. During the most easy birth the womb sustains a struggle, and recovers from a shock such as no other viscus is exposed to undergo. This is not explained by saying the uterus was ordained for such a trial; but we must admit that, when Nature formed a part for a certain purpose, she wisely endowed it with those powers which were necessary for the fulfilment of its office. The dangers of parturition are so numerous that delicacy is naturally attributed to the organ principally concerned in the act; but though the body be always prostrated, the uterus generally regains its vigour after its burden is cast forth. There is on my part no desire to dispel those convictions which protect the female in the hour of labour; but I am

anxious to destroy those prejudices which may lessen our ability to alleviate her pains. We do not find the internal mucous membranes suffer generally from cold. Injections of the temperature of the atmosphere are commonly thrown into the urethra, and the water of the well taken into the stomach usually causes a sense of refreshment. In some gastric disorders ice is prescribed with much advantage; and I should only resist its application to the interior of the womb from a conviction that so low a degree of cold was not required to produce the desired effect. All that is wanted is such a reduction of temperature as would stimulate the organic fibre to contract; and, so far as the trials I have made warrant any conclusion, pump water is equal to this intention. I have used it in other cases, and I will here narrate one in which it was employed immediately after delivery.

I was requested to see a small terrier bitch that had been some hours straining to bring forth her pups. The animal was of the highest breed, not weighing more than five pounds. One pup was in the passage, and, by separating the labia, could just be seen. No attempt to interfere with the natural process was made; but the hands were employed to assist the action of the abdominal muscles when the throes came on. In a few minutes the pup was sufficiently advanced to be laid hold of, and, after some time, with gentle traction it was brought forth. The pup was dead; but on examination I discovered there was another to be born. The bitch was evidently exhausted, and I therefore left it undisturbed for two hours. No signs of progress being then exhibited, a little sweetened brandy and water was administered, and in half an hour the dose was repeated. The throes then reappeared, and, four hours and a half from the first birth, a live pup was extracted. The bitch lay upon its side, and could only feebly bestow those attentions to its offspring which in ordinary cases these animals afford with such evident satisfaction. I was endeavouring to restore the exhausted strength of the dog, when I observed a stream of bright arterial blood flowing from the vagina. The hemorrhage gradually increased, and the bitch, raising itself, began to shew symptoms of delirium. The case looked desperate, and, concluding that the bleeding was caused by the uterus, in consequence of the enfeebled condition of the animal, not having power to contract, I resolved to resort to the injection of cold water. Half an ounce of tincture of galls was mixed with a quart of water drawn from the cistern which supplied the house; but not more than the third of a pint had been used before a sharp but low cry informed me that the agent had done its work. No more was injected, but the hemorrhage ceased, and the bitch seemed to be refreshed. She was evidently stronger, and took that notice of her pup which pre-

viously she wanted consciousness to give. Both the animals afterwards did well, and at the present moment are alive.

In uterine hemorrhage Dr. A. T. Thompson has advocated the use of cold water; but, notwithstanding the countenance of so high an authority, its employment has not been recognised by the generality of obstetric practitioners. The minds of men seem to view the practice either with abhorrence or alarm; but I cannot say that such feelings are warranted by the observations which I have made upon its operation. It acts almost as a charm, and in no instance has been followed by any ill effects. The only symptom which could possibly be urged against the injection of cold water is the pain which it occasions, probably caused by the sudden contraction of the whole of the uterus. I am induced to conclude the cry is indicative of a simultaneous contraction of the entire organ, because, every part of the internal surface being equally acted upon, there is no reason to suppose any portion of it would escape the stimulating property of the injection. Another fact, which also supports this opinion, is found in the dogs not afterwards repeating their cries, but speedily recovering from the shock, and composing themselves to sleep. There has not in either case been any return, but with the first cry the matter appeared to have terminated. The pain is, however, of brief duration; for, judging from the exclamation of the animals, it was hardly recognised before it had ceased, and even while it lasted did not in degree appear to approach to agony. It seemed to be a short spasm of no excessive violence; but, as after-pains are not common in the bitch, and never present in that animal when the uterus is healthy, obviously no absolute deduction could thence be drawn concerning the action of cold water upon the human subject. Its operation upon the dog has, however, been such as would justify its being tried; especially as it seems to be beneficial in those cases which are always accompanied with danger, or frequently are beyond the power of medical skill to alleviate.

I cannot conclude without acknowledging that the operation of any medicine upon the dog is by no means to be regarded as authorising its adoption into human practice. The reverse, however, appears to be the general opinion. The inferences drawn from what are termed experiments upon these animals, I must insist are not of the value which is generally placed upon them. The substance which the man takes as a condiment, to the canine race may be a poison; and drugs which are mild to the dog are in many instances potent when administered to the human being. The public have favoured me by consulting me largely upon the diseases of dogs, and to treat these I have been obliged to resort to medicines which are not generally employed even by veterinarians.

There is no animal concerning the treatment of which so much ignorance prevails, or one which so frequently suffers from the measures designed to cure its disorders; conspicuously, therefore, little can be inferred from that concerning which we know so little. To insist upon a sameness where only a remote likeness can be proved to exist is obviously wrong; and, while anxious to rescue the most affectionate and sensitive of animals from the useless persecutions of science, I am also desirous of making the public more fully alive to the dangers which are inseparable from every species of inhumanity. Charity is no less the duty than it is the interest of mankind, and certainly no creature has a stronger claim to our regard than the poor beast whose generosity of disposition is cruelly converted into a reason for subjecting it to torture. Were the dog by nature savage, fear in the toxicologist and others would rescue it from those fruitless barbarities which nobler sentiments appear to be incapable of inducing such persons to abandon.

I remain, your's sincerely,

EDW. MAYHEW.

16, Spring-street, Westbourne-terrace.

PROTRUSION OF THE RECTUM IN A TWO-YEAR-OLD COLT.

By W. CARTWRIGHT, M.R.C.V.S., Whitchurch, Salop.

ON the 30th August, 1848, Mr. —, of —, discovered, about six o'clock A. M., that a two-year-old half-bred colt of his had a part of the rectum protruding at the anus.

Four o'clock P. M.—I saw him, and found a tumour, the size of a large fist, hanging out at the anus. It was of a red colour, and across it there was an irregular incision, an eighth of an inch deep, as if it had been torn by some nail, or, what appeared more likely, had burst from over-distention. On particularly examining it, I found that it was a portion of the surface of the lower rectum, which was grasped by the sphincter ani, the compression moulding it into its present shape. The animal was in no pain—was, indeed, grazing in the field. I had him put into a stable; and then I returned the gut, and bled him to a gallon, and ordered that he have nothing to eat, and that some one should be in constant attendance, night and day, to return the gut whenever it became forced out, which

was often the case, as his bowels were very lax in consequence of his having escaped into some after-grass. Gave pulv. opii 3j.

Sep. 1, Three P. M.—Has not yet evinced any abdominal pain. Bowels sufficiently lax. The tumour is frequently protruded, but is growing smaller, and seems becoming disorganized, its red hue changing to a brownish colour. This, I fancy, is the effect of the continued action of the sphincter muscle upon it around its neck. I bathed it with cold water and a solution of oak bark, and returned it.

Sep. 2.—About the same. Continue same treatment.

4th.—About the same; if any thing, the tumour is less. The gut comes down about as often as before. He never evinces any abdominal pain, nor does he strain any more than usual. Whenever he dungs, or even coughs, the tumour is protruded, and on the rectum retracting is not permitted to pass through the sphincter. The muscle being stimulated by it, contracts around its neck, and so prevents its retraction. The tumour is very vascular towards its base; but the great bulk of it is of a dark brown and yellowish colour, and has every appearance of sloughing: indeed, about the cracks we can already detach small pieces. I ordered it to be put up occasionally; but told them not to give themselves much trouble about it in the night, as I thought it would take no harm if it was left out; on the contrary, indeed, for then the sphincter might act as a ligature on it, and cause it to slough away. Take care not to over-feed him.

8th.—Going on very well. Tumour less; removed portion of dead matter, and afterwards applied the actual cautery. Also sent a liniment of diluted acid. mur. to apply to the joints. The tumour recedes of itself occasionally after dunging.

11th.—Still diminishing. I removed more flaps of dead matter. There now remains but little of the actual tumour, but what does remain is very vascular and ragged. Applied the cautery again, and also some cupri sulph. It mostly returns of itself after dunging. All that I am afraid of, now, is that it may take on some unhealthy action, of a cancerous nature, and not heal up. He is turned out a little every day into the field, and is in perfect health.

13th.—The tumour continues to grow less. Seldom stops out now after dunging. Apply argent. nit. to it.

16th.—I introduced my hand up the rectum to ascertain what condition the tumour was in, but found scarcely any of it remaining, merely a little ragged surface, which I touched with cupri sulph. Whenever he dungs the gut retracts where the tumour was; and there is nothing now for the sphincter to lay hold of. He is to be turned out night and day, and left to nature. I have

no doubt all will come right. I consider this to be a rare case. At one time I thought I should have had to apply the ligature to make a good cure of it; but I was almost afraid of venturing on it, since the neck of the tumour was large, and I had never had any experience in such cases of the result of such practice. And yet, I fancy, it would have proved successful. I should like to hear the experience of others concerning applying the ligature in tumour of the rectum.

In this instance of my own, I thought at first it was only serous; afterwards, however, lymph must have become effused into it.

EXOMPHALUS CURED BY LIGATURES.

By the same.

June 14, 1848.—THIS day saw a cart foal, two months old, belonging to a gentleman in this neighbourhood, that had an umbilical hernia, which had existed ever since birth. The opening into the abdomen is about an inch and a half in diameter, and the tumour hangs down for about the same depth. The intestines can be forced into the abdomen, but on removing the pressure they immediately return again. Not knowing of any better method for its cure than the ligature, I determined to try it again in this case, having before been successful with two others. Accordingly, I cast him, and put a ligature of string on as close to the abdomen as possible. Ordered abstemiousness, and that the animal should not be turned out to grass.

17th.—No unfavourable symptoms have appeared. The tumour is hot, but seems as if it was becoming strangulated. The ligature is deeply embedded. The opening into the abdomen is considerably lessened already. It is now merely a slong slit, not above an inch wide in its widest place. Applied a brass ligature, tighter than the last, in the same place.

20th.—The tumour is sloughing and separating. The skin near it is still warm; perhaps only from contiguity. The swelling about the hernia is extending forwards under the abdomen. He looks duller, as if feverish; but will drink whey, and eat grass. Has been out in the field with the mare part of the day and night. Foment the parts well several times a-day, and keep the bowels lax.

22d.—The swelling around the hernia has subsided, and the tumour is nearly off. Take the cord ligature off, since it is of no use, and tighten the metallic one.

26th.—The tumour has separated, and the opening has become pletely filled with granulation. The surface of the wound is about an inch and a half in diameter, and quite firm. I cannot feel the least opening into the abdomen, though this cannot be properly ascertained, on account of the swelling around the parts. In a few days after the wound had cicatrized, and the opening was perfectly closed.

Foreign Extracts.

[We have received the French, German, and Belgian veterinary journals; the last up to June.]

THE FRENCH REVOLUTION PRODUCTIVE OF VETERINARY REFORM.

THE French Journals, a-la-mode des François, though rather out of place, one would think, in *Veterinary* publications, are exulting in their "glorious" revolution. To be sure, as the sequel will shew, they have some reason for this; and therefore, since *la Republique* seems politically to suit their views, we shall not withhold from our brethren on the opposite side of the channel our congratulations on the good terms on which they appear to be with "the powers that be," and the expectations they in consequence seem to have of obtaining boons for their profession which by their former Government were peremptorily refused to them. In February last we find M. Bouley, the spirited editor of the "RECUEIL," addressing his subscribers in the following enthusiastic strain:—

"To our Brethren."

"At length France has entered on her destinies!

"After a supreme and glorious struggle, among all the struggles she has encountered for sixty years past, revolution is definitively triumphant!

"A new era is opening on our country, an era that will turn out prolific in sublime thoughts and sublime actions!" &c. &c.

Sic Venit gloria mundi.

At the end of March we find M. LE REDACTEUR, in the same patriotic ardour, recounting with feelings of pride and satisfaction the part which the students at the Alfort Veterinary College played during the "glorious" revolution.

"The grand events of the month of February," says M. Bouley, "have interrupted the progress of study at the Alfort school for

nearly eighteen days. It was not until the 15th of March that our pupils were able to quit the honourable post which had been assigned them at the Hotel-de-Ville, to return to their studies. This compulsory vacation has been too importantly employed for us to feel regret at it; even were it not that the high sense they have manifested of the novel duties in which they have been engaged has furnished us with a sure guarantee of their making up for lost time, by repairing with redoubled diligence to their studies.

“The Alfort pupils have already, in the most honourable manner, reaped the fruits of their conduct. The Provisional Government, through M. Arago, has expressed to them their congratulations on the zeal and devotion they displayed during the trying days which followed the revolution, and, in remuneration for their esteemed services, has promised them *un drapeau d'honneur*, which will be preserved at the College as a trophy for future generations.

“And besides, M. Bethmont, Minister of Agriculture and Trade, has come to preside in person at the re-opening of the Session; and in warm terms has thanked the pupils, in the name of the government, for what they had done for the service of the republic; at the same time that he has impressed upon them the necessity of their returning to their studies with redoubled zeal and diligence, a duty rendered the more imperative from the recent revolution calling upon every citizen for more towards his country, and which, under the republic, could not be accomplished save through efforts and services such as would raise every individual in the estimation of those around him, and render him highly deserving of his country.

“Lastly, that nothing might be wanted on the part of the pupils to fill their measure of satisfaction, their comrades at the other schools, those of Lyons and Toulouse, have been eager in uniting their laudatory tributes with those already offered, and have addressed to them brotherly letters of congratulation such as are far from being accounted the least of their reward.”

And yet the same chivalrous or rather republican spirit does not seem to have animated the breasts of the pupils of the Toulouse School as inspired those at Alfort; for, at Toulouse, says M. Bouley, “if we are rightly informed, the pupils, unable or unwilling to comprehend the grave obligations imposed upon them by recent events, have viewed the grand revolution but as the sordid occasion for emitting pitiful and base recriminations against their director and professors. Forgetting that they were wholly indebted to the republic for their agitation and power, they have taken advantage of the preponderance the revolutionary movements have thrown into the hands of the people to demand of the

government commissary *the cashierment of their director*, for being guilty, as they allege, of *aristocracy* !”

And now, to announce the important event about to signalize the veterinary community of France, an event brought forth by the recent revolutionary changes—In consequence of an appeal made by the editors of the “*Recueil*” to their professional brethren in February, a letter signed by MM. U. Leblanc and H. Bouley, was sent to the veterinarians of the Seine, convoking a meeting preparatory to their formation into an electoral body to fix on the choice of candidates to serve in the national representation. At this meeting was concocted a circular to be sent to all the veterinarians in France, acquainting them with the result of its deliberations.

This letter—which we have not room for in detail—announces that the veterinarians of the Seine have formed themselves into an electoral body with the view of trying the question, whether their common professional interests did not call upon them to unite their efforts *to return one of their members to the National Assembly* ; and that it had come to the decision—1st. That its election should fall on the most worthy candidate, whatever might be his profession. 2dly. That it will be desirable for the candidate to combine, along with other first-rate qualifications, special aptitude for veterinary, agricultural, or medical pursuits. And the letter concludes with the intimation—“That it is also the duty of the ‘*Commission*’ to inform their honoured *confrères* that they are likewise charged by the Electoral Assembly with the project of organising a VETERINARY NATIONAL ASSOCIATION, whose chief care will be purely the interests of the veterinary profession. In a very short time the plan of this association will be submitted for the appreciation and judgment of the assembly.

“For our own part,” says M. Bouley, “we applaud with all our heart the spirit which dictated this circular, and we feel firmly persuaded our brethren will follow its *inspirations* ;” for, “only during the month it has yet existed has the Republic done more for the interests of our profession than all the governments in succession in France from the commencement of the (present) century.” Happy, happy French veterinarians!!

And in proof, adds M. Bouley, of the good intentions of the Republic towards us, I submit the following decree of the Minister of Agriculture and Commerce:—

“IN THE NAME OF THE FRENCH PEOPLE.”

“The Minister of the department of Agriculture and Commerce, considering, on the one part, that the instruction given in the veterinary schools is insufficient, no less as concerns the

treatment of neat cattle and sheep than in regard to agricultural studies, and that their appears room for amelioration in both these branches :

“ And that, on the other part, what relates to the practice of veterinary medicine, the ordonnances and regulations actually in force contain no clauses giving permission to put down empirics in the practice of animal medicine, calling themselves veterinary surgeons :

“ And that it is indispensable such a state of things should without delay be remedied, being as it is no less hurtful to agriculture than to the progress of the veterinary art :

“ It is ordered—

“ 1st. That a Commission sit charged with the consideration of measures prudent to be taken, with the double view of rendering the system of veterinary education complete in the National Veterinary Schools, and of regulating the practice of veterinary medicine.

“ 2dly. That this Commission shall consist of the citizens—Bouilland, Dean of the Faculty of Medicine ; Boussingault and Rayer, Members of the Rural and Veterinary Section of the Academy of Sciences ; Thierry, Doctor of Medicine ; Yvart, Inspector-General of Veterinary Schools ; Renault, Director of the Alfort Veterinary School ; Prince, Director of the Toulouse Veterinary School ; Bouley, Delafond, Magne, Professors at the Alfort Veterinary School ; Huzard, Veterinarian, Member of the Committee of the National and Central Society of Agriculture ; Bouley, the younger ; Barthélemy, the older ; Crepin and Leblanc, Veterinarians at Paris ; Riquet and Laborde, Principal Military Veterinarians.

“ BETHMONT.”

“ Paris, March 29, 1848.

Suffice it to add, that the Commission is already constituted under the presidency of M. Renault, and the vice-presidency of Bouilland ; MM. Bouley and Prince being the secretaries. And, to the end that their labours may be facilitated and hastened, they have made a division of their committee into two sub-committees.

We are not prepared to say whether this commission will consider itself competent to take cognizance of the position and functions of army veterinary surgeons ; whether it does or does not, however, our military brethren may rest persuaded that their rights will not be overlooked.

Already, at the suggestion of M. Renault, has the Society of Veterinary Medicine appointed a Committee—of MM. Yvart, Riquet, and Renault, reporter, to prepare a digest of the important

questions they feel concerned in. And as soon as this business shall be settled, the society intend to present themselves before either the secretary at war or the provisional government itself, to lay before him or them the low and debased condition of the army veterinary surgeons, and in justice demand that they may have granted to them, at last, such position and functions as they have a right from their services to claim, and which the interests of the cavalry service imperiously call for.

"We are in hopes," says M. Bouley, "that the National Assembly, to whose hands are about to be confided the destinies of France, will reckon among its number some of our veterinary brethren. M. Magne, Professor at Alfort, stands for Avignon, his own country; Professor Delafond for Nièvre, and Loiset for the department of the North." And our Editor concludes with the gratifying intelligence—"just received"—that M. Richand, veterinary surgeon, has offered himself for the department of the Cautal, through the Central Committee of Elections.

Recueil de Médecine Vétérinaire, March 1848.

*The Clavelisation (Inoculation for Small-pox) of Flocks of Sheep
viewed as a Measure of Sanitary Police.*

By O. DELAFOND.

(*Fourth and last Article.*)

Summary.—WILL the laws regulating the sanitary police of animals authorise the government to peremptorily order the inoculation of sheep which are in good health forming parts of flocks contaminated with the pox? Could such a measure be extended to flocks threatened with contamination? Executive powers in the two cases—antecedent powers over inoculation imposed as a measure of sanitary police. The opinion of jurisconsults in the matter of government right.—Legal powers.—Inviolability of property.—Discussion of these several questions under the supposition of inoculation being imperatively ordered. *Resumé and conclusions.*

As will be seen from the above programme, the fourth and last article on this important subject is devoted to a consideration of the nature and operation of the acts of the French legislature, together with the several judicial decrees touching the prevention and arrest of epizootics, as applicable to inoculation, &c., matters which can little or nothing interest us on this side of the channel.

We shall, therefore, bring our translations on the subject of inoculation for small-pox to an end, with the 32d and last paragraph, in which we find embodied the following

GENERAL CONCLUSIONS.—Sheep-pox is a contagious disease, annually prevalent among the flocks of sheep in France, and frequently occasioning fearful ravages among them; the existing sanitary measures for protection against general and epizootic pox being, for the most part, insufficient to confine the disorder within limits, and stay its progress. Inoculation, either of the flocks already infected or of those menaced inevitably with it, may accomplish this; and yet a measure so simple, facile, and serviceable cannot, at the present day, be legally put into execution, so long as it remains unrecognised by our sanitary veterinary laws.

We have, therefore, no alternative but to come definitively to a conclusion; vexatious when one comes to consider that it is a question touching the conservation of 33 millions of sheep possessed by France for feeding and clothing her 33 millions of population.

Recueil de Médecine Vétérinaire, April 1848.

ŒSOPHAGOTOMY ON A COW.

By BAUDIUS, Veterinary Surgeon, Merseburg, Prussia.

IT seemed that this cow had got to a basket of potatoes which had been left in the yard, and had bolted several pieces, some of which had lodged in her throat. The following symptoms were observed:—A large quantity of frothy discharge from the mouth—the eyes wide open and glassy—the tongue black and protruding from the mouth—respiration increased, laborious, and very audible—pulse 80. In the course of the œsophagus, about midway between the head and the chest, there was a hard tumour about the size of a hen's egg. On pressing this tumour with the thumbs and fore-fingers of both hands, in order to move it, the cow evinced such pain that it required three assistants to hold her. No efforts, however, could move it in the least, either backward or forward. Attempts were made to force it down by the introduction of the probang, but on this the animal became so unruly that it was necessary to desist from any further trials. And, as the tympanitis was very great and increased with every effort, as a last resource, the operation was proposed by Herr Baudius, and to it the proprietor at once consented. The cow was instantly cast and secured, the head being

extended; and, as it was already very dark, the operation had to be performed by candle-light. The skin was divided over the tumour to the extent of five inches, and, having dissected down to the œsophagus, a potatoe, four inches in diameter, was extracted. This, however, it was necessary to cut in two pieces, to avoid extending the opening in the œsophagus. As soon as the obstruction was removed, the patient became quieter, the tympanitis subsided, the discharge from the mouth ceased, and the bringing together of the parietes of the œsophagus became easy. This was done by three sutures, which were twisted together at the lower end of the incision. The divided ends of the skin were brought together in like manner with four sutures. This done, and the cow released, she was moved into the stable. Her head was fixed as high as possible. A bandage with a pledget over the wound was applied. This was easily kept in its place by extending it over the whole length of the neck, which, in the cow, offers great facility from its shortness. Cold applications were ordered during the night, and neither food nor water allowed.

On the following day there was some swelling of the parts, and the respiration was slightly increased. Although the cow was lively, some meal and water that was ordered her she refused, and it became necessary to administer gruel out of a bottle; but, as the sutures were any thing but drawn tight, a small portion of the drink escaped through them, and this tended to irritate the divided parts.

During the first three days after the operation she was drenched only once a-day. The fourth day all was going on well. The swelling had become reduced: she now took her gruel; and the rumination of the ingesta contained in the rumen previous to the accident re-established itself. In consequence of the regurgitation of the food, however, a considerable quantity lodged in the wound, causing the parts to bulge out like a fowl's crop, which effectually prevented any fluid from escaping through it.

Under these circumstances it seemed impossible for the parts to unite; for as soon as one portion was dislodged another would occupy its place, and so prevent the healing process most effectually. On the fifth day the appetite completely returned. To prevent, however, any farther accident to the parts, she was kept from all solid food, and was allowed in lieu a pailful and a-half of oatmeal and bran twice in the day. This still disturbed the wound, so much so, indeed, that it assumed a livid appearance, and the divided edges became callous from the constant irritation caused through the contact of these foreign matters. The parts were touched with caustic, the sutures drawn tighter, and an application of cantharides, to which pot. tart. of antimony had been added, was applied. This produced a considerable swelling: the wound assumed a healthy appearance,

and, in spite of the disturbance caused by the deglutition of the liquid food, and an occasional rumination of the remainder of the ingesta of the rumen, the parts began to heal.

As the last of the sutures came away, the wound opened again to a considerable extent. To re-apply sutures to the œsophagus was impossible, on account of the tumefaction of the parts caused by the application of the cantharides. Large pledgets of tow were applied, and a bandage, drawn as tight as possible. By this means, in the space of three weeks the wound was perfectly healed: nothing could be seen but a small cicatrix. About the beginning of the third week after the operation loss of appetite occurred. This was attributable to the absence of solid food in the diet, the digestive organs becoming fatigued by the constant liquid food. This slight indigestion was removed by the administration of decoction of wormwood and chamomile, with the addition of antim. potass. tartras.

*Magazin für die Gesammte Thierheilkunde, 1tes
Quartalheft, Berlin, 1848.*

RUPTURE OF THE DIAPHRAGM, WITH THE INTRODUCTION OF PART OF THE RETICULUM INTO THE THORAX, IN A COW.

By HILDACH, *Veterinary Surgeon, Quarg.*

THIS cow was six years old, and exceedingly emaciated. She refused her food—was very dull—gave little milk—rumination was suspended—slight tympanitis—alvine evacuation scanty. Some sulphate of soda had been given. At the end of a week the cow died, and Herr Hildach was requested to make the *autopsia cadaveris*.

On opening the abdomen, about a quart of yellow reddish fluid presented itself. The stomachs were distended, but it required great strength to draw them from their situation. The blood-vessels of their outer coats were injected. The rumen contained a quantity of coarse food. The small intestines were quite empty. The large intestines contained very little ingesta. The liver, spleen, and pancreas, were normal, with the exception of several hydatids on the liver. The diaphragm adhered to the ribs through the medium of a plastic exudation (*membrana spura*); about the middle of this organ, rather more to the right, close to the sternum, there existed a round opening about three inches in diameter, through which the anterior portion of the reticulum had penetrated

into the thoracic cavity, while the posterior portion was still retained in the abdomen. False membranes had been thrown out, by means of which strong adhesions had been formed, uniting the diaphragm to this portion of the stomach as well as to the ribs. There was also a convolution of false membranes which connected the apex of the pericardium, with the stomach and diaphragm, to the right ribs, towards which the whole of these viscera were slightly drawn.

Herr Hildach suspected that these organic alterations were caused by some foreign body, most likely pointed or sharp, which had penetrated the stomach, diaphragm, and pericardium; but nothing of the sort was found; not the slightest cicatrix could be perceived. On opening the pericardium a quantity of yellow serum escaped. The bloodvessels of the heart were injected in several places. The muscular structure was firm. The right ventricle contained frothy blood; the left, coagulated blood. The pulmonary artery, as well as both lobes of the lungs, were gorged with blood, which was coagulated in the largest vessels. The right side contained much more than the left; this, however, was accounted for by the cow lying on the right side. Some hydatids were also found in these parts.

Considering the different adhesions, this state of hernia of the diaphragm must have existed for some time. How the functions of digestion were performed is difficult to say. The rectum, fixed as it was in the rupture and attached by strong adhesions, could not have performed any of its normal functions. And how this extensive normal injury was inflicted is also a mystery. It might have been produced by the pressure of some blunt instrument, such as the horn of a cow, which in the act of butting might have struck the cow in question just at the termination of the sternum. The deviation to the right of the organs would lead to the supposition that the injury was inflicted on the left side, and that the animal had since constantly lain on the right. The skin, by the pressure of a blunt substance, would stretch sufficiently without dividing to rupture the diaphragm, and the other accidents which succeeded would be accounted for.

*Magazin für die Gesammte Thierheilkunde,
1tes Quartalheft, Berlin, 1848.*

* * * Want of space compels us to defer the examination of the Belgian Journals until next month.

Home Extracts.

EXTRACTS FROM PROFESSOR JOHNSTON'S LECTURE ON THE APPLICATION OF SCIENCE TO AGRICULTURE, DELIVERED AT THE YORK MEETING OF THE ROYAL AGRICULTURAL SOCIETY.

AT the York Meeting of the Royal Agricultural Society, Professor Johnston delivered, to a large and influential body of gentlemen and agriculturists, a lecture "On the application of science to agriculture," in the De Grey rooms. The Earl of Yarborough, the President of the Society, was in the chair, and he briefly introduced the lecturer to the meeting.

Professor Johnston commenced his lecture by remarking, that it was a striking circumstance in vegetable growth, that some plants were seen to thrive on one kind of soil only, on one geological kind of formation. They would meet with them in abundance in one country or district of Europe, where chalks, or marls, or limestone, or similar sandy salt-bearing soils, occur; while in the rest of Europe you seek for them in vain. On soils of almost every kind were corn-growing plants, which find their support on every geological formation. Was it illogical to perceive, by this startling fact, an evidence that the Deity wills that man should subdue and people the whole earth? While inquiring into this fact, he would make two further observations; first, that the corn and herbage do not grow with equal luxuriance on all soils, or give an equal return; and, secondly, that on the same soils on which, when left to themselves, they grow in an unhealthy manner, they prosper when they are attended to and properly cared for by man. Was it illogical, therefore, to suppose that the Deity intends the soil to be tilled, not only with the sweat of the brow merely, but by the intellect and the ingenuity of man; and that mental should combine with bodily industry everywhere to obtain the means of sustaining human life? They could not walk through the rural districts, and look at the young corn in spring, without being struck with the varying green as they went from enclosure to enclosure. The sickly yellow and the healthy green each clearly and distinctly express the natural defects of the soil, and the careful attention of the husbandman. *

Having alluded to the difference in the appearance of crops, Professor Johnston directed attention to the influence of knowledge when brought to bear on the science of agriculture, and to the evils arising from the want of it. He viewed this defective knowledge in two aspects—ignorant, as individuals, in comparison to what

others know, or defective in knowledge compared with what is to be discovered. There, no doubt, existed in the heads of the smaller number of successful and practical men a large amount of information unknown to the great mass of farmers, but which, he shewed, ought to become the property of all. It was true that meetings like the present were a kind of large Lancasterian school, which ministered to their neighbours such information as it was desirable they should know. * * *

Instead, therefore, of addressing them in the present lecture upon the elementary and scientific principles which bore upon the question of practice, or occupying their time by discussing the details of some more or less important branch of rural art, he believed he should consult more the importance and dignity of this national meeting by endeavouring to set before them a brief outline of the actual condition of scientific agriculture, and especially of the present state of rural economy in relation to chemistry, and he hoped to do so plainly; that, while it should be generally interesting to such as took wider views, it would, at the same time, be as intelligible and instructive to all as a mere elementary address could be.

There were three distinct questions which would naturally arise in their minds: First, what had been the progress in amount and in kind which scientific agriculturists had made amongst themselves during the last ten years; Secondly, what was the actual condition of this advanced knowledge at the present moment; and, Thirdly, what should now, in consequence of that condition, be especially done in order further to make easy its advancement.

As to the first of these questions, were they to judge from the character of agricultural literature of 1848, compared with that of 1838, they would conclude that a vast stride had been made. At the latter period the aid of science was all but scouted amongst the older agriculturists in different parts of England; and the strongest of the agricultural periodicals that ever touched upon the subject at all, for the most part undervalued the worth of natural science to the farmer, and ridiculed the pretended value of chemistry. Now, however, the weekly journal was considered badly conducted which in every number did not embody some scientific and especially some chemical information. Scarcely a provincial paper which boasted of an agricultural corner, but indulged freely in chemical nomenclature as being more agreeable to the taste and within the easy comprehension of almost every farmer, while the bearings of geology and physiology on rural industry were discussed by countless correspondents in the increasing, though still limited, agricultural periodicals. But though, in a free country like this, the periodical press must follow the public lead, and must be regarded as a free and general index of the time and tone of

the public mind at any given period, yet the spirited character of the agricultural journals marked rather the progress of the people than the progress of the science.

When about eight years ago he first began to study, with a view of writing on this subject, his mind was especially arrested by three several circumstances. First, by the want of correctly ascertained facts in experimental agriculture. The benefits of this or that mode of procedure, the effects of this or that circumstance upon the soil or the crop, he found described in books in a loose and general manner. In the second place, he was struck with the theoretical writings—the crude and hasty premises—some of them scarcely deserving the name of guesses at truth. It was one thing to write for a desire and another for the advancement of truth. It was one thing to propound brilliant conjectures, and another to note down the results of hasty thoughts, and, after cautious consideration, to bring those opinions before the public. Speculative and fanciful theories, highly poetical, and often indicative of high talent, formed the centre key to agricultural science. He would add, from his own experience, that the constant demand to excitement which widely prevailed amongst agriculturists operated upon those scientific men who were engaged in their behalf in a manner which was unfavourable in a high degree. Be cautious, and, having exercised this caution, wait patiently for its results, which were sure to follow.

He had often been struck with the wide deficiency which everywhere presented itself in matters connected with the rural economy of the soil, the plant, and the animal. The same would be true of the chemical history of animal and vegetable life, for knowledge appeared everywhere more necessary to secure practical progress. Besides those three, he had met with numerous acknowledged facts in practical agriculture, for which no explanation, in accordance with existing knowledge, had been, or could be, offered. Such was, then, the state of knowledge on this subject. It was naturally, therefore, suggested to the friend of agricultural progress that the separation of objects to be investigated would be the means by which this deficiency, as regards facts, would be gradually supplied, and this theoretical redundancy lopped off. It was first suggested, therefore, that accurate experiments should be undertaken, and also that measures, adapted to varied circumstances, should be resorted to for the instruction of the public, for explaining the kind of experiments to be made, how they were to be set about, and how they might be expected to succeed.

It would at once occur to his audience that great advantages were likely to result from such a process of experiments, by no means limited to the purposes for which they were immediately

intended; and he might say, not only throw light upon the points they were expected to clear up, and to develop scientific causes, but also to suggest further experiments: these others gradually leading to a more extended augmentation of knowledge. Besides, though in all probability not directly contemplated, this process was sure to realize one of the most important purposes of all experiments,—the ascertaining of facts, and the elucidation of the certainty of causes. Yet the prosecution of those measures in connexion with rural economy was also fitted to give new and interesting data, to introduce a more careful observation and recording of facts, to waken new thoughts, and gradually to impart a higher tone to the mind of our rural population. It also tended to convert agriculture from an empirical art—from a mere intellectual pursuit of learned men—to less purely scientific and abstract, but not less important ends, worthy of those for whom the experiments were, in the first instance, recommended.

This movement was felt to be worthy of general and serious consideration, so that it became evident that those who would not participate in it would become the Gibeonites of their class; and, though the progress of such changes measured by the length of a single life might appear slow, it was a sure progress nevertheless. Some present might have sons who would become hewers of wood and drawers of water to others now occupying their own position; and those sons of theirs would look back with regret to their neglect manifested in the education of their youth, and justly forget to load their memories with a regard for those to whom they are indebted for many natural blessings, when they felt how much wiser was the affection of those who cause their children to be instructed in their youth. The second point urged upon the agricultural public was the rejection of received views, and of every opinion, by whomsoever propounded and propagated, which was not based on the observation of facts, requiring them simply as calculated to encumber and conceal the foundations of truth. This directly tended to clear away and make work for the discovery of more useful principles. To remove one wrong opinion which had obtained a prominent and settled place in the public mind, and which, perhaps, had in the first instance been only introduced on the authority of some great name, was also, perhaps, doing not a little to the establishment of some important truth. The lecturer believed that the inculcation of this cautious spirit was attended with the best effect, and it gave to the heads of our rural community a more practical turn.

It was then suggested that agricultural associations might be formed to advantage for the purpose of testing the value of the various improvements which might be brought to notice, and for

the encouragement of others still to be made. Such associations were accordingly established in Scotland, Ireland, and England, and in the order in which he had named those countries. This was followed by the formation of similar institutions in the United States of America and in the various countries of Europe. To the numerous researches originated by these associations were to be added those simultaneously carried on by private individuals in various branches, in addition to others consequent upon the investigations of scientific men, with respect to facts hitherto unintelligible and unexplained. As the result of these various movements, a multitude of facts had been brought to light in the relation of agriculture to other branches of science, its connexion with geology, physiology (animal and vegetable), &c. To enumerate all the points which had come under discussion, and which, after the most ample investigation, had been determined, would occupy far more time than the most zealous listener would be found to give a willing and patient attention to. One of the greatest points to be attended to was the value of chemical science. Its practical advantages were no longer matter of dispute, and its importance was now everywhere, in every civilized country, readily conceded. A large body of men who, five years ago, openly opposed the efforts making to advance a more scientific practice of agriculture, were now amongst the most forward to obtain a share in the honour of that advance to identify themselves with the diffusion of its benefits. In the first place, the experiments which were made, he need hardly tell them, brought into use various manuring substances hitherto scarcely thought of. The experiments were adopted by some for the advancement of their own profit, and by others simply by those of scientific discovery. Amongst the latter was the Highland Agricultural Society of Scotland, in whose Transactions were recorded by far the most important investigations hitherto undertaken, and the results of which have already proved invaluable to all agriculturists. Other societies have sprung up in England, Germany, and other countries, many of whose labours have proved scarcely less valuable. As before stated, to detail all they have effected, all the great principles in agriculture which they have brought to light, would be impossible in the space of a lecture. The Professor then stated some of the more general deductions which may be made from the results of those researches.

*

*

*

It might be asked—Had the past experimental researches done no good? He certainly would declare they had done good, and that all the efforts thus made had not been thrown away. If no other good had been done, the minds of the experimenters had been called into action, and the results of the experiments had

undoubtedly given birth to more precise modes of reasoning. The agricultural class had likewise been roused to possess a large number of books. It had also induced many intelligent farmers to become members of this great society, whose formidable motto was "science with practice," and thus take the lead in their own districts in the advance of an art which they were not formerly aware how much they could promote. The Professor then urged the necessity of a further effort being made in this department of agriculture. In commencing a new method of research they must first learn how to proceed with accuracy before they make a certain progress. As this could only be attained by making actual trials, they must be content to fail in their experiments. Lives might be well spent in this work; and the more they advanced, the more important would their investigations become. The accuracy of experiments would depend upon the genuineness of the manures used, but to the practical man this was actually a money concern. And this remark led him, in the second place, to advert to the manufacture of artificial manures as one of those circumstances which strikingly marked the advancement which scientific agriculture had made among us of late years, and the position which it now occupied. The possibility of concentrating great fertilizing effects in small bulk had been demonstrated in a very remarkable degree by the article of guano. In watching the progress of this branch of science, and marking the obstacles which had from time to time stood in its way, it had appeared to him as if the finger of Providence might be recognised in the introduction of this foreign substance. More grain was wanted to feed the people, and more manure to raise it. A more portable and manageable form of manure was desired, that it might be applied more easily and frequently than hitherto. How many years of almost unavailing labour might teachers of science have spent before they could have satisfied the agriculturists that large bulks of manure were, in many cases, unnecessary, and that the success of their crops might be traced to the fertilizing qualities of any mixtures which were recommended to them! But guano came, and the old principle, that "seeing is believing," forced new ideas into the oldest heads, and a new belief into the mind of the farmer. "I will try some myself next year," was the often expressed resolution of men convinced against their will. Chemical analysis then took the matter up, declared that guano could be imitated at a reasonable rate, and published a recipe for compounding mixtures to be tried against it. Immediately half-instructed men, supposing the conclusion to be already arrived at, engaged in the manufacture of artificial manures, as a sure and easy way of making money. * * *

That their position, in regard to agricultural theory, was mate-

rially improved during the last five years, was clear from a few examples. It was known that the bodies of animals contained much nitrogen. This nitrogen they obtained from their food, and this food was all originally of vegetable origin. Now, vegetable food was found to be more valuable in proportion as the per centage of nitrogen was found to be greater; it came nearer to the nature of the animals themselves. It was thought that, by a proper arrangement of the manure, the farmer could regulate the quantity of nitrogen in his corn, and experiments were made in order to determine the point; but this opinion had not borne the test of rigid experimental and chemical criticism. He then mentioned some experiments which were made on the growth of turnips by Mr. Laws, and which were published in the eighth volume of the Transactions of the Royal Agricultural Society. The result of those experiments appeared to be that the proportion of nitrogen in the turnip might be increased by the application of manures containing nitrogen. This report was valuable in itself, and an addition to our theoretical probabilities, but it did not afford us any more ground to speculate upon. * * *

He had stated a number of points in regard to which the union of scientific investigation in the laboratory with the experiments in the garden would lead to important results in connection with many important points relating to the theory of agriculture, all of which have a most important bearing upon practical agriculture, as he might shew if he had time. Several gentlemen here called out "Go on;" but the lecturer declined acquiescing, for the reason that he was not accustomed to address a large audience except from written notes.

Among these theoretical points, more important if possible than the questions he had previously treated of, were the questions in regard to the nitrogen of plants. What were the natural sources of nitrogen which all plants required? How much did they need? What functions did they perform in nature? How much remained in the plant? How much escaped into the air from the leaves? All these were questions having an important practical bearing, to the solution of which a high degree of importance was attached. He would explain in part how this arose. Nitrogen was acknowledged to be an important part of the food of plants, as it contributed to the formation of those substances upon which the production of muscle in animals was supposed to depend. Nitrogen had hitherto been supposed to remain for the most part in plants, but recent experiments in the United States had shewn that plants constantly gave off nitrogen in large quantities from their leaves. It appeared probable that nitrogen entered into plants by the roots, and that only a small proportion was left at last in the full grown plant com-

pared with what was thus discharged into the atmosphere. If this were so, they could see how it was that plants required a great deal more of this nitrogen in their food than had hitherto been supposed, and that the combinations it must form in plants were more numerous than had hitherto been ascribed to it. He should not be going too far in saying that a thousand pounds would be well spent if it could be made to clear up this important subject of inquiry.

He would now touch on another point. They had all heard of the infusorial animalculæ which the oxy-hydrogen microscope shewed to swarm in a drop of stagnant water, and which abounded wherever water and decaying vegetable matter existed together. They abounded in most soils; did they not abound in all? If not in all, in what soil were they most abundant? Did they, like larger insects, prey on living plants? Had they any thing to do with the ravages committed on clover and corn? Another important point, too, was the various processes by which bogs might be reclaimed.

Here, then, was a field of inquiry rich in promise, and the cultivation of which demanded the united labour of the out-door experimentalist, the chemist, the microscopist, and the geologist. He might also draw their attention to other important inquiries, such as the influence of light on vegetation, the feeding of stock, dairy husbandry, and the best mode of promoting the growth of wool, all of which it was desirable to enter upon with the united aid of the practical and scientific agriculturist. But who was to undertake the inquiries he had named? Some thought that they lay within the provinces of an agricultural college; but the proper province of a college was to teach, not to investigate; to diffuse existing knowledge in the first place, and in the second place to enlarge that knowledge. Others thought that our agricultural associations should embrace these objects.

No doubt these means existed, and such bodies might very fitly undertake these objects, but he would not venture to enter into the question as to how this end might be best effected; his purpose was rather to suggest materials for future thought and consideration than to lead them to the adoption of any plan of his own. He could not help feeling a kind of regret in thus indicating to others trains of research so interesting to follow to himself, in thus, as it were, discovering to a stranger the secret of hidden treasure he had hoped himself to dig up. In this progress of knowledge, in thus helping forward in some new track, there was so great a charm and an honour, that were it possible, with the means and life of one person, he should himself attempt to carry forward what he had suggested, and he should scarcely have ventured to point out to

them what he would himself for the sake of science cheerfully perform. But the life of one man was too short, and his means too limited. His knowledge was too confined to allow of his hoping to see much progress made by his own hand under his own immediate direction, or even during his own lifetime. It was something better and higher, while they did not cease to labour themselves, that they should point out the way to others also, and enlist and encourage the ardent spirits who were springing up around them, and awaken and stimulate the attention of the experimental philosophers who were springing up in other countries as well as our own. As one who, meditating on the shores of an unknown sea, discovered far-off islands lowering largely on the horizon, which he could never himself hope to visit or approach, or on some brighter day pictured on false clouds, by the wonderful mirage, fleets, contending armies, or beautiful cities, appearing to his admiring eye, which in bodily presence he could scarcely hope to look upon: so in his glimpses of scientific fields, inviting but unapproached, with kindred feelings must the votary of knowledge remain content to point out to others what he himself has but faintly described, or even more brightly pictured in his own eye, leaving to them the task of fully unfolding what he himself had been unable to overtake. Professor Johnston, in conclusion, thanked the audience for the courteous attention which he always received from the body of men to which they belonged.

On the motion of the Earl of Yarborough, a vote of thanks to Professor Johnston was voted by acclamation for his able and talented lecture.

York Herald.

YORK FARMERS' CLUB.

Extracts from Mr. Mechi's Lecture, on Breeding, Feeding, and Rearing, delivered at the York Agricultural Meeting.

MR. MECCHI was favourable to farmers breeding their own stock, which he found to be far more gainful than that of purchasing it. It was supposed that grass land and space were required for breeding. From this supposition he differed. Food could be taken to the cattle. An animal fed in a box on the best food, he was satisfied would grow better than one in the fields. He knew this by practical proof, having made the experiment, and thought that the old opinion on the subject was destined to be soon discarded by every farmer. While he sold his barley-meal at sixpence, to the

pigs or to the bullock it was worth not less than sevenpence half-penny. Bullocks sold for less than pigs, which accounted for this difference, and yet as much food was required to produce a pound of beef as a pound of pork. The farmer would find it far more advantageous to rear pigs than bullocks. He hoped the time would come when poor grass lands in this country would be the exception and not the rule. He held as a principle that whatever is unprofitable in farming is wrong, and hence he would rather that an outlay should be made to improve the condition of land, because the return would be proportionately great.—*York Herald*.

DISINFECTANTS, AND THE RIVAL PROFESSORS.

AMONG other mercantile enterprises to which the dread of the cholera will probably afford a stimulus, the compounds offered to the public as disinfectants will, without doubt, hold a prominent place. While it is desirable, and of the highest importance, that every remedy or preventive known to possess efficacy should be made available in case of need, it is equally important for the public to be warned against the error of placing undue reliance on alleged specifics, the value of which has not been satisfactorily established.

We have already pointed out the marked distinction between a deodorizing agent and a disinfectant, and stated the grounds upon which we conceive that the destruction or modification of putrid odours does not imply a neutralization of the contagion with which they are sometimes accompanied. In our notice of some of these preparations now before the public, we gave one of the vendors (Mr. Ellerman) credit for having avoided the general error, by simply recommending his compound as a deodorizer. We observe, however, that, in his advertisements, he has followed the example of his rivals; and we are entertained with a vigorous competition and controversy between the three professors of disinfection, Sir William Burnett, Director General of the Medical Department of the Navy, Charles Ellerman, Esq., and M. Ledoyen.

We have before us the printed parliamentary reports and correspondence on the respective fluids of these gentlemen, namely, the chloride of zinc, pyrolignite and perchloride of iron, and nitrate of lead. On glancing over these documents, which are rather voluminous, the most striking fact is the conflicting nature of the statements, each professor or his advocates contradicting the assertions of the other. Among the reports are recorded sundry

experiments in deodorizing night-soil, in which the comparative merits of the three rival fluids are brought into competition. Sometimes one professor complains that undue favour was shewn to the others to his prejudice; then we have a reply, a rejoinder, an appeal to the nightmen, conflicting analyses, and opinions professional and non-professional, official correspondence; and last, not least, we may mention a curious collection of paragraphs and puffs from the periodical press, and a copy of the handbill in which the magic fluid is enveloped, with the usual caution about the signature and seal of the patentee on the cork. Each fluid in its turn is infinitely superior to the others: each is described as the best disinfectant as well as deodorizer, but, each having two opponents, the evidence is two to one against this testimony.

In the face of this energetic support of the three specifics, we have the lamentable fact that Ledoyen's right-hand man fell a victim to the fever which he was sent abroad to allay; and the unfortunate circumstance that, in the recent opening of the sewers in Westminster, several fatal cases of fever occurred, although Sir W. Burnett's fluid was used for deodorizing the miasm.

Mr. Ellerman is more general in his statements about disinfection, and lays much stress on the fact that both the other fluids are poisonous, from which it might be inferred that his is not. In reference to the testimony of the nightmen, Mr. Ellerman states "the men were very much pleased, and preferred our fluid to Sir W. Burnett's." Mr. Roe (Surveyor of the Commissioners of Sewers) asserts that the foreman and men "suffered much more from the odour it gave out than they could possibly do by any effluvia from the worst cesspools."

During this spirited investigation chloride of lime appears to have been almost forgotten, the inventor being dead, and the article too common to tempt any fresh champion to come forward.

In reviewing the whole evidence we are confirmed in our former opinion, that the three fluids have substantiated their character as deodorizers, but that none of them can be relied on as disinfectants. It would be going too far to say that they possess no efficacy whatever in the latter respect, but the evidence on this point is by no means conclusive. In the event of cholera making its appearance, the merits of the rival fluids may very properly be put to the test, but this should not in any degree supersede the adoption of other precautions.

Pharmaceutical Journal for August 1848.

VETERINARY JURISPRUDENCE.

(Before Mr. Justice Cresswell.)

ANDERSON *v.* ROBSON.—CASE OF WARRANTY.

Mr. Knowles and *Mr. Unthank* appeared for the plaintiff; and *Mr. Martin* and *Mr. Udall* for the defendant.

This was an action for debt, to recover the sum of £95 for a horse sold by the plaintiff to the defendant. The defendant pleaded, "never indebted."

Mr. George Anderson, the plaintiff, lives at Benwell, near Newcastle; and Mr. Robert Robson, is a horse-dealer at Lobley-hill. The horse in question had, in 1845, been purchased by the plaintiff from the defendant. It was then a young horse, and not in good condition, and the price then given was not equal to what it was sold for to the defendant. On the 12th of July last the defendant went to the plaintiff's, and wished to look at the horse. He rode and examined it, and then began to bargain about the price. The plaintiff asked £100 for it, and the defendant offered £85. The defendant at length agreed to give £95; and sent his servant for it the same afternoon, who told the plaintiff that he thought the horse was lame. The plaintiff replied, that if that was his opinion, he had better not take the horse, but if he took him away he would not take him back. The servant accordingly left it. Some conversation afterwards passed between the plaintiff and defendant, and the horse was taken by Mr. Anderson to Messrs. Plews and King, veterinary surgeons, for examination. These gentlemen at first thought him sound, but afterwards gave a certificate that the horse laboured under incipient spavin, and was consequently unsound. Mr. Anderson sent the horse to Mr. Robson's, and that gentleman returned it to Mr. Anderson, who refused to receive it. He then sent it to the livery stables of Messrs. Plews and King, where it remained until expenses amounting to £17 had been incurred, when it was sold by auction for £31 to Mr. Cookson.

The defence was, that the plaintiff had warranted the horse sound, and the animal having proved to be spavined, the defendant could not be called on to take him; and *Mr. Martin* further denied that the defendant had ever, in fact, accepted the horse at all. The evidence, however, as to the warranty, went only to shew that the plaintiff had said, on the defendant making inquiry, that the horse was sound "as far as he knew," and it did not appear that the plaintiff had previously discovered any thing the matter with him.

The Jury found that there had been no warranty, and consequently returned a verdict for the full amount, £95.

The Times, August 7th.

R E V I E W.

Quid sit pulchrum, quid turpe, quid utile, quid non.—HOR.

HORSES; THEIR VARIETIES, BREEDING, AND MANAGEMENT IN HEALTH AND DISEASE. By H. D. RICHARDSON, Author of "Dogs," "Pigs," &c., with numerous Illustrations, drawn by Chas. Grey, and engraved by H. Oldham. Small 8vo. pp. 97. 2d 1000. M'Glashan, Dublin; and Orr and Co. London. 1848.

AMONG the remarkable features of the age we live in, to be transmitted down to those who may live after us, an overwhelming and unceasing production of literary merchandise, good, bad, and indifferent, and of books in the greatest variety and cheapest of forms, most assuredly will not be the least conspicuous. Penny Magazines and Penny Cyclopædias, first put into circulation by the "Society for the Diffusion of Useful Knowledge," led the way to cheap literature, and had, perhaps, a good deal to do with its profusion as well; and like the "penny steamboats" plying on our busy metropolitan river, no doubt in the numbers of their customers have had their reward. Whether literature in such cheap and crowded forms really begat any great amount of knowledge, or whether the knowledge which it did beget was of a "useful" character, are questions we pretend not here to determine, farther than they have relation to medicine. And certainly here, as the maxim so current in law equally holds good with us—that "a little knowledge is a dangerous thing"—we should say that in the practice both of human and veterinary medicine, instead of being productive of good, it has done harm, as well to doctors as to patients. Open-mouthed, good natured John Bull is too ready to swallow dogmas wrapped up by quacks and impostors, like the ladies' pills, in gold leaf, labelled with the golden letters that medicine, as though it were one of the mathematical sciences, admits of being reduced to unerring cause and effect; that for every malady there exists an appropriate remedy, for every poison a certain antidote; and that it is only to become acquainted with the disease and the

remedy empirically set against it, to be able to comprehend and practise "the whole art of medicine." In the instance of the human subject there exist wholesome checks to the practice of these dangerous doctrines. Man, *pro tanto*, is himself a judge of what will do him good or harm ; and if he be not, he is at least apprehensive for his life or his limb ; and even if he be neither one nor the other, yet will the law, in such a case, step in and protect him from harm. But the poor abused dumb animal has in this respect no protector. Nobody will step to his aid, and say to one, "You shall not give this horse poison," or to another, "You shall not cut off this dog's leg for experiment." No! the poor brute must quietly and patiently submit to any cruel or—what is pretty well tantamount thereto—any empirical or insane medical practice that his humane(?) master or other amateur doctor may subject him to, though it be diametrically certain that his limb or his life must pay the forfeit of the misdeed.

This is the evil which cheap and popular works have for the most part inflicted on veterinary medicine ; a class from which we feel much pleasure in being able, on this score, to except Mr. Richardson's little work, though it be of the catalogue of the cheap serials of the day.

"The less," says Mr. Richardson, "the amateur doses or quacks his horse the better. Fortunately, veterinary surgeons are sufficiently numerous, and no written advice, however copious in its details, could at all supersede their services." *Preface*, p. iv. Again, in the very last sentence in the book : "Whenever a horse worth saving displays symptoms of illness, send without any loss of time for—not a village farrier or "cattle doctor"—but (for) a regularly educated and diploma'd VETERINARY SURGEON." p. 97.

This disarms veterinary criticism ; at least, nobody has any great right after this to find fault with Mr. Richardson's chap. xviii, on the "Diseases of the Horse ;" though, for any utility it can serve, we opine it might as well have been altogether omitted. But we suppose our author had his "instructions," since in his "Preface" he tells us, "all this detail was to be compressed into *my hundred pages*." p. 1.

The least curtailed and most interesting part of the epitomized epitome before us is that devoted to the history of the horse. Mr.

Richardson holds Egypt, and not Arabia, to be the “original *habitat*” of the horse.

“ Much has been written as to the original *habitat*—the first great breeding country of the horse. Arabia and Egypt are the rival claimants; popular opinion has long been in favour of the former, but these pages not being suited to a lengthened discussion of the question, we may just state, that, beyond any doubt, the latter (Egypt) is entitled to the honour. One fact, out of many, may be adduced on either side. In the sacred writings, when describing the very earliest stages of the world, we find the horse in extensive use in Egypt; while, in comparatively modern times, when Mahomet attacked the Koreish, we find not a single *horse* in the entire camp—shewing how scarce, even at so late a period, were horses in Arabia, and how plenty (plentiful) at so early a one, they were in Egypt. There is, of course, no question but that Arabia subsequently became a great horse depôt, and that in that country this animal attained to a very high degree of perfection; for, in point of fact, it is to the introduction of Arabian blood that the blood-horses of the British Islands owe their present eminent position, maintaining, as they do, an undisputed superiority over all others.”

The following account of the Arab will be read with the same interest as all historical and domestic particulars ever will be touching the most perfect and beautiful animal of the horse species the natural world produces.

“ In Arabia the horse runs wild, and is, even in that feral and uncultivated state, a creature of the most exquisite beauty of form, and endowed with the greatest mildness and generosity of disposition. In size these animals are small, usually averaging between thirteen and fourteen hands high. Their colour is usually a dappled grey, but sometimes a dark brown, with short and black mane and tail. They are caught in snares carefully concealed in the sand, by which the feet are entangled, and the terrified horse, falling to the ground, is easily captured. This is the only mode by which they can be taken, their amazing swiftness rendering all idea of chasing them with dogs, or on horseback, utterly out of the question. The wild Arabs are now nearly extinct, the high price given for Arabian horses having induced the natives to draw largely and constantly upon the resources of the desert. To the wandering Arab the horse is of the greatest value. The poorest Bedouin has his steed, which shares with him and his wife and children the shelter of his humble tent, his caresses, and his scanty fare. Oft may the traveller in the desert, on entering within the

folds of a tent, behold the interesting spectacle of a magnificent courser extended upon the ground, and some half dozen little dark-skinned, naked urchins, scrambling across her body, or reclining in sleep, some upon her neck, some on her carcass, and others pillowed upon her heels; nor do the children ever experience injury from their gentle playmate; she recognises them as the family of her friend, her patron; and towards them all the natural sweetness of her disposition leans, even to overflowing. The Arabs invariably keep *mares* in preference to *horses*; they find them endure fatigue, and the privations necessarily consequent upon a journey over the desert, better; a number of them can also be kept together without danger of their quarrelling or injuring each other: on this account it is very difficult, indeed, to induce an Arab to sell his mare. The Arab is particularly careful of his horse's *coat*; he washes the legs, tail, and nostrils, regularly, morning and evening, or again after a long ride; the mane and tail are left in their natural state, and very seldom even combed, lest they might be thinned. The animals are fed only during the night, and from morning to evening they get nothing but one or two drinks of water. From sunrise to sunset they are kept, ready saddled, standing at the door of the tent.

“The Arabs carefully preserve the pedigree of their horses, and divide them into classes, or castes. The most noble of these can, it is said, be traced back to the steeds on which Mahomet and his companions rode the night of the memorable “Hegira.” The mare is, as we have stated, almost unpurchasable, there being, indeed, a law prohibiting her exportation; and the horse is only to be obtained at the most enormous prices—one thousand pounds not being extraordinary, and instances being on record of mares having gone to double that money. We conclude with a brief description of the appearance of the pure Arabian, as found in a domesticated state, and we conceive this the more necessary, as so many spurious Arabs are frequently endeavoured to be palmed upon the unwary or inexperienced.

“The thoroughbred Arab never exceeds fifteen hands, and rarely fourteen hands and a half in height. *The skin is pure black, or blue-black*, a circumstance which gives to a white horse of this breed that beautiful silvery grey colour, so indicative of the purest blood; brown, bay, and chestnut, are good colours, but it has long been remarked in India, that *no dark-grey horse* was ever a winner upon the turf.”

Unbelievers, ourselves, in any “short roads to knowledge,” it would be absurd for us, as veterinarians, to pretend to hold up works like the one we have been perusing in any scientific point

of view. For all this, however, we do not hesitate to affirm, that, to the general reader, it may prove a book of some "useful knowledge" concerning horses, and we feel perfectly assured that any such person who may spend a couple of hours in its perusal—for it will not occupy him more—will lay it down pleased with our qualified commendation of it.

THE VETERINARIAN, OCTOBER 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

REFERRING to the "Reports of the Proceedings of Council" contained in our Numbers for last month and the present one, it will be seen that a question came, incidentally as it would seem, before the Members of Council for discussion, which has certainly, up to the present time, not been surpassed in interest and importance by any topic of debate ever yet entertained by the same body. We say, "incidentally" came before Council, because the question appeared to have had its origin out of a casual conversation that occurred between Mr. Dennison and Mr. Field; or rather out of a meeting which, in consequence of such casual conversation, subsequently took place between these two gentlemen and the Government Solicitor, Mr. Coulson, brought by the former, and our own President, Mr. Thos. Turner, brought by the latter.

From its having originated in this manner, there naturally arose some demur in entering into the discussion of the question submitted to the consideration of Council, whether it presented itself in any *official* form. There was great room, and reason too, for disputing its official character; at the same time, though it really were shewn to be unofficial, or but semi-official, as Mr. Goodwin aptly on the occasion remarked, there appeared little doubt, looking at the quarter whence it had originated, that, were it not so at present, "it could very soon be made official," should the decisions of Council be found to call for it.

The question submitted for the deliberation of Council was to the purport—"That no by-laws hereafter made by the Council

should be valid (or operative) without the sanction of the Secretary of State, and that the present by-laws should receive his approbation, after which no alteration should be made in them without his consent." And it was a question which, added to its own intrinsic weight, imposed so much the more responsibility on the Council, from the circumstance of an absolute *yea* or *nay* being demanded upon it. There was no middle, no mediatory course to be pursued.

Such a question comes before us, comprising two highly important considerations:—one is, what it is we are asked to surrender?—the other, to whom, or for whom, are we asked to make such surrender? It appeared, we must confess, strange to us that, touching the first division of the question, any doubt should have been raised as to the nature or amount of the concession of our charterial rights which we were asked to make. Strangely—most strangely—as it sounded to our ears, in the course of the discussion, a query was raised, whether the introduction or addition of such a clause “would *interfere* with the existing Charter.” If for the word “interfere” *destroy* had been substituted, we should have felt less surprised, and still have entertained little doubt concerning any issue to which legal opinion would have brought, and subsequently did bring, this question: Mr. Garrard, the new Solicitor to the Royal College of Veterinary Surgeons, being in attendance on the occasion, and deciding on the spot, that such powers as we through our Charter now possess could be set aside only by a grant from the Crown of *superior powers*; and that such clause, as proposed, would embrace and convey such “superior powers.”

This settled the point of “interference.” And now, we would ask, what really and truly is the “power” we are required to surrender? Neither more nor less, it may be answered, than the same which, on a former occasion, we were asked to consign into the hands of the “Veterinary Board,” viz. *the power of managing our own affairs*. If we be deprived of the power of making operative laws—compelled to submit for approval every law we concoct to the Secretary of State—then does the Secretary of State, to all practical intents and purposes, rule over the Royal College of Veterinary Surgeons.

Now, as the Secretary of State is said to hold similar rule over the Royal College of Surgeons, it is possible we might be taunted with being "unreasonable," or even "perverse," to refuse to make such concession. The College of Surgeons, however, we opine, did not seek or concede such State power, but found it already embodied in their charter. We, on the contrary, hold a Charter unfettered by such mancipatory clause, but are now called on to have the same introduced; with a sort of minatory whisper into our ears, that, in the event of our dissent, "other charters" may be obtained; and that our own Charter would never have been granted without it, but through some "mistake" or "oversight" committed at the Home Office. Then, again, the College of Surgeons may be said to have a representative in parliament, and certainly can, at all times, exercise influence there; veterinary surgeons, however—the general body of them we mean—neither have nor are likely to have representatives or influence. And, besides, not only are we without either parliamentary or state influence, but there is a section of our professional body opposed to us—the Royal Veterinary College—which through their President and Governors possess both, and which therefore might reasonably be expected to have such weight with the Secretary of State as would probably tend to our disadvantage. On these several accounts the College of Veterinary Surgeons is widely differently positioned from the College of Surgeons.

We cannot conclude without offering our warm and hearty congratulations to the Council for the firm stand they made against cession of representative power and right on the occasion on which the grave question, gilded as it was presented to them with the emblems of privilege and peace, came for positive decision before them. To have yielded a point of such magnitude would have been to have let go

"The prop that doth sustain our house;"

to have taken the key-stone out of the arch of our Charter; to have let in upon us "a power," the limits whereof would have proved to us uncontrollable, and the consequences whereof the longest and keenest foresight among us would have been unable to reduce to calculation.

The case of "Hock Lameness and Fracture of the Tibia," related by Mr. Broad in our Number for July last, elicited from us some observations on the subject of concealed or undiscovered fracture, which have since received ample elucidation at the hands of Messrs. Younghusband and Nelson in our impression for September, and this for the present month. The mooted point in question has been productive of this practical good: it has demonstrated that many a fracture exists where no broken bone is suspected; and that there are certain kinds of injury in certain situations which the veterinary practitioner will do well, *primâ facie* at least, always to regard with an eye of suspicion. Kicks from horses upon either the arm or the thigh of a quadruped, be that quadruped a horse or an ox, a dog or a sheep, armed, as horses' feet are, with iron, and formed as that iron is with a projecting edge, are exceeding likely to cause a fracture; at the same time, surrounded and closely invested as the radius and tibia are with muscles, and braced together as the surrounding muscles are by faschia, a fracture of either one or the other bone being, as it commonly turns out to be, *oblique*, is likely to hold together long enough, not merely for the animal to walk away afterwards into his stable, but even to do work, and, may be, hard and rapid work, for a greater or shorter time afterwards. And it is quite surprising what amount of labour and speed has been accomplished by horses after their limbs have been fractured. Mr. Younghusband mentions an instance (in THE VETERINARIAN for July) of a cart mare having been ridden by her master a distance of seventeen or eighteen miles to market, going only "a little lame" at first, and, though her lameness increased, still carrying her master back "within a mile of home," before she "stumbled and fell," and then for the first time betrayed her fracture. The radius proved to be broken two inches below the elbow. Mr. Nelson has recorded a case (in the same Veterinarian) to which he was called on account of the cart mare—the subject of it—being "lame." He examined the lame limb, in which abscesses had now formed, and distinctly heard and felt the crepitation of a broken radius. And yet, as he was informed, the mare had been lame eight weeks, during the first two of which, "not being much lame," she had performed pretty well her usual work. She had been in a cart a

distance of twenty-two miles, and by herself had brought "sixteen loads of wheat!" The fractured *humerus*, though less favourably situate for the purpose, will sometimes hold together after the same manner. Mr. Nelson, as related in this month's *VETERINARIAN*, was called to look at a "lame" horse. Examination of the near fore limb elicited "a fracture of the humerus." The horse had been kicked a month before, and yet had worked "almost ever since;" and had that very morning been to Sheffield, a distance of five miles, for manure, *without going "lame;"* when, on being turned afterwards into the homestead, he suddenly fell, the fracture having given way.

Many like cases are, no doubt, to be found reposing in the records or memories of veterinary practitioners, and some, perhaps, there are among them of a yet more extraordinary and surprising character than any we have hitherto read of: lest in the latter by time—that *edax rerum omnium*—they should become effaced, or in the former, through some mishap, become "lost" or "mislaid," we would counsel the possessors of such *raræ aves* to deposit them without delay in the iron safe of *THE VETERINARIAN*. The point suggested to us in practice by the unparted fracture, the stability or tenacity with which the cracked or broken bone holds together, is sufficiently established to put us in all such cases on our guard. It is a point which veterinary authors have, some how or other, overlooked, and one which young practitioners are exceeding apt to take insufficient heed of. On these accounts, we have deemed it of too much importance to pass it over without once again directing professional notice to it.

Mr. Gowing's case of "Fracture of the Cartilage of the Foot" is a novelty in veterinary surgery. We have on record examples of fracture of the pastern and coronet bones, of the coffin and navicular, but we lacked one of the ossified cartilage: since ossified it must become before it can be fractured. And in the ossific condition, consisting as it does of bone extremely porous and extremely fragile, it is more likely to fracture on the application of violence than any other part about the foot or leg. Liable to hurts of the nature of the one described by Mr. Gowing, arising too often out of the heedlessness of those who have to do with

them, horses working on railways and wharfs, in breweries and collieries, can hardly fail to meet with injuries of the kind; and this case of Mr. Gowing's will serve as a guide to diagnosis in such accidents in future. Wounds or contusions, in certain situations, happening to horses whose foot cartilages are likely to be in a state of ossification, will at once excite suspicion, if not alarm, in the mind of the veterinary practitioner; and this will lead to surgical examination and appropriate treatment. Mr. Gowing deserves, and will receive, the thanks of the profession for making so important and practically useful a discovery.

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

(ADJOURNED SPECIAL MEETING.)

Sitting of August 28, 1848.

Present,—The PRESIDENT, the SECRETARY, the TREASURER, Messrs. PRITCHARD, CHERRY, sen. PEECH, ERNES, JAS. TURNER, BRABY, SILVESTER, GOODWIN, ARTHUR CHERRY, PERCIVALL, GODWIN, SPOONER (Professor), and MAYHEW.

THE minutes being read and confirmed, the opinion given by the Solicitor, which was noticed in our last report, was now formally read. It being clear that the proposition submitted to the Council could not be adopted without injury to the interests of the body corporate, after a lengthy discussion, it was rejected. The former meeting had been so prolific in argument, that there was nothing new brought forward on this occasion.

There being a general desire to pursue a course which should have the tendency to amicability, it was proposed that a deputation should be appointed to wait on those parties who had forwarded the proposal, and that these parties should be applied to, to fix a day for a meeting.

Professor Spooner said, that it ought to be understood that Mr. Dennison had full authority from the Governors of the Veterinary College to act; that the adoption of the proposal made to the Council would nullify the provisions of the Charter; that some of the Bye-laws were of doubtful legality.

This latter question being started, it was proposed to take the opinion of the highest legal authority.

Mr. Percivall said, that the *onus probandi* lay with those who

opposed the Bye-laws, and he should oppose the taking of any further legal opinion.

It being moved and seconded by Messrs. *Field* and *Godwin*, "That a deputation be appointed to wait on Mr. Coulson and Mr. E. Dennison, M.P.," the same, after some debate, was carried; and the President, the Secretary, the Treasurer, and the Solicitor, were nominated as the deputation.

Mr. Mayhew strongly condemned the nomination of the Solicitor, both on grounds of its inutility, and as a needless expense.

Mr. Ernes took the same view, and these gentlemen moved and seconded the amendment,—to the effect that the name of the Solicitor be omitted. But the general feeling being, that as the deputation would have to encounter a lawyer, it was but fair that a lawyer should form part of the deputation, upon the principle of Greek against Greek.

The President having been requested to communicate the result of the deliberation on the proposed new measure to Mr. Coulson and Mr. Dennison, these gentlemen being the acting parties in bringing such measure forward, the business terminated.

Mr. Pritchard made a few observations on the meetings of Council being held on the Wednesday.

Messrs. Godwin, Peech, and Silvester followed on the same subject; and it was finally put as a motion and carried, there being only three dissentients, that the meetings of the Council should be held, in future, on the Friday, at 5 o'clock, P.M., instead of as heretofore on the Wednesday at 6 o'clock.

Adjourned.

MISCELLANEA.

CONTAGIOUS AND INFECTIOUS DISORDERS IN CATTLE.

BY an Act of last session (11 and 12 Victoria, cap. 105), and with the view to prevent the introduction of contagious and infectious disorders among sheep, cattle, horses, and other animals, power is given to Her Majesty in Council, by order, to prohibit the importation of sheep, &c. Quarantine may be imposed, and all cattle imported contrary to the provisions of orders in council to be forfeited, and penalties are imposed on persons so importing cattle.—*The Times*.

FRENCH CATTLE.

WE have before had occasion to notice the arrival of cattle, for several successive weeks past, by the steamers trading between

the metropolis and Havre, as being of more than usual interest, in consequence of the supply of live cattle from France not having been of so common occurrence as from other of the continental states of Europe. We perceive that a vessel has now arrived at the Brunswick Wharf, Blackwall, with an entire cargo of cattle from Nieuport, comprising 144 oxen and cows of French produce. The name of the vessel bringing the cargo alluded to is the Emerald, which, we believe, to be one of the steam packets which was previously a passenger boat between London and Boulogne. We need scarcely remark, no importation of horned cattle to this extent from France has, on any former occasion, taken place, and the arrival is of very considerable interest.—*Times*, Sept. 23.

PHYSIOLOGICAL ACTION OF CHLOROFORM.

To understand the physiological action of this substance, it is necessary to remember that sensation is dependent, first, on the existence of consciousness, which is a function of the brain proper (that is, all that portion of the encephalon situated above the corpus callosum); secondly, on the integrity of the spinal cord; and, thirdly, on the integrity of the expanded filaments of the nerves which receive the impression. Loss of sensation may be caused by injuring either of these portions of the nervous system; for, if the nervous filaments are diseased, impressions cannot be received; if the spinal cord be injured, impressions are not transmitted to the brain; and, if the brain be disordered, the consciousness of the impression is not experienced. Now, the object of giving chloroform ought to be to suspend the brain's functions without affecting the spinal cord, the medulla oblongata, or the sensibility of nerves, and thus produce loss of sensation by rendering the mind unconscious of the impressions made upon nerves. It is questionable, therefore, whether chloroform or ether should be denominated anæsthetic agents, because anæsthesia is generally understood to mean loss of sensibility in a part; whereas, in point of fact, it is suspension of the faculties of mind, and unconsciousness of external stimuli, that they produce. In man this is rendered apparent by the fact that the functions of circulation, respiration, uterine contractions, &c. proceed during the comatose state, which would not be the case if the sensibility of the nerves distributed to those organs was destroyed. In animals similar facts may at once be demonstrated by the action of galvanism, which, when they are perfectly comatose, produces convulsions, spasms, and other reflex movements.—*Dr. H. Bennett's Report*, *Edinburgh Monthly Journal*, Jan. 1848.

THE
VETERINARIAN.

VOL. XXI,
No. 251.

NOVEMBER 1848.

Third Series,
No. 11.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

[Continued from page 484.]

DISEASES OF THE BURSÆ MUCOSÆ AND SYNOVIAL SHEATHS.

No person having any pretension to anatomical knowledge need be told that the parts named, or rather misnamed, by the old anatomists BURSÆ MUCOSÆ, are not bags of *mucus*, but bags containing a fluid similar in its aspect and properties to *synovia*, or joint oil; and that the sheaths of tendons, "the synovial sheaths" as they are usually called, are kindred structures to them. The bursa mucosa consists simply of a membrane, of the same texture as synovial membrane, thrown into the form of a sac or bag. The synovial sheath nothing differs from it save that the membranous sac is commonly prolonged and enlarged, and is apt to run into divers complex and irregular shapes. Both bursa and sheath form circumscribed inclosures; and in this respect both bear considerable analogy, as well as in the texture of their membranous walls, to the shut cavities of the joints. Dr. Alexander Munro* satisfactorily established the identity in structure, sensibility, and disease, between the bursæ and the capsular ligaments of joints. He found the membrane composing one and the other thin and dense, and possessing little sensibility in disease, but great sensibility in a state of inflammation; and that, though transparent in the bursa, it was as capable as the capsular ligament of confining air or any other fluid. That the cavity of the bursa should be shut, the same as that of the joint, and secluded through the density of its parietes from all around, appears requisite, not merely that it may retain the fluid secreted into it, but that no other fluid, not even air, may

* In that section of his works entitled, "A Description of all the Bursæ Mucosæ of the Human Body." *Edinburgh*, 1785.

gain admission into it: the presence of air being found, the same as in joints, to derange its secretory function, and create inflammation. Hence it is that an opened bursa or tendinous sheath is regarded in much the same light as an opened joint, or at all events as a case calling for more medical skill and attention than any flesh or skin wound of the ordinary description.

BURSAL AND THECAL STRUCTURES, being appendages to the locomotive apparatus, are regulated in their number and distribution by the amount or extent of motion particular parts of the body possess. This accounts for the bursæ and sheaths of tendons being met with exclusively in the limbs; and for those in the horse, in particular, as an animal forced into speed and labour under heavy burthens, coming so frequently under our notice in states of alteration or disease: the form such altered or morbid condition assumes being usually that of, what is called,

WINDGALL.

Such an appellation naturally leads any body to suppose that "wind" must constitute the swelling known as *windgall*; whereas, in point of fact, it is a bursa filled to distention (not with *wind*, but) with the same kind of synovial fluid of which it contains, for the due performance of its function, but a moderate proportion in a state of health.

THE SYNOVIAL (AND BURSAL) MEMBRANES IN DISEASE exhibit phenomena analagous to those of their correlative tissues, the serous membranes. Under inflammation—or under even simply increased vascular action—we know how prone the serous surfaces are to emit serous fluid in unnatural quantity, and coagulated lymph along with it. The same propensity brought into action by similar causes is manifested by the synovial and bursal membranes. But the synovial is not equally disposed with the serous structure to run into the adhesive inflammation. Effusion of lymph does occur, but not so often, in joints and bursæ. Rheumatic inflammation of joints is one example of it; the intense inflammation which now and then supervenes on severe broken knee, another. We have seen the entire surface of the synovial lining of a joint thickly coated with coagulable lymph. And this, we repeat, is the case not in joints alone, but, on occasions, in bursal and thecal cavities as well. The usual or ordinary form, however, and we may add the simplest form, under which disease of bursa presents itself is that of *windgall*.

THE NAME OF WINDGALL is a remnant of barbarous veterinary nosology. Derived from the words *wind* and *gall*, the "corrupt jelly" or black-looking matter which chronic windgalls are now

and then found to contain, appears to have been called "gall," not from any resemblance it was thought to bear to bile, but merely from its rancorous malignant aspect. The old writers on fariery entertained notions, from the puffy fluctuating sensations the tumours upon the legs of horses convey to the feel, that they contained, as well as other matters, "wind" or *flatus*. By Vegetius, the skin covering the tumour was said to be "inflated after the similitude of a bladder;" and Bracken defined the windgall to be a "windy" or "flatulent tumour," and thought it arose from "overstretching the sinewy parts;" and that it was "*air* which had the most to do in the matter;" although a little farther on the same author informs us, that "windgalls are soft yielding flatulent tumours or little bladders *full of corrupt jelly*."

THE APPELLATION OF "WINDGALL" IS COMMONLY RESTRICTED to the bursal tumours upon the sides of the fetlock joint. Such restriction of its meaning, however, is neither warranted by authority nor supported by pathological investigation. SOLLEYSELL, who defines "the windgall" to be "a soft swelling, caused by a cold, phlegmatic, and serous humour," used the word in a *generic* sense; for, although in one place he tells us windgalls "are seated on either side of the fetlock joint," in another he informs us that they "sometimes grow upon both sides of the *hock*." And this is the proper sense in which windgall, in our opinion, ought to be understood: a *bog spavin* and a *thorough-pin* being, in a medical point of view, quite as true windgalls as the tumours usually so called at the sides of the fetlock joints. Therefore, the observations we are about to make on windgalls we intend should be understood as meant to apply to bursal tumours of every description, be their situation where or their nature what it may.

THE ORIGIN OF WINDGALL will be more likely to be satisfactorily elicited through an inquiry into the functions the bursæ in a state of health are intended to answer in the animal economy, and the mode in which these functions are carried out in the economy of the horse in particular, than by any other course we can pursue. The bursæ are contrivances of Nature to facilitate the sliding of tendons and muscles, and even of the skin, over bones or other tendons, ligaments, or cartilages, or other projecting parts. By preventing too close approximation, and consequent friction, they not only protect the parts between which they are interposed against any irritation that friction might create, but by removing the slightest impediment to it, they facilitate movement, and thus become aids to locomotion. And although but passive aids, still may the bursa be regarded as parts suffering abuse from any excess of action, whether such excess consist in intensity of force or of frequency. Such excess of locomotion as goes by the name of

“work” or “hard work,” we find to be very commonly succeeded by the appearance of windgall, either in the form of what is usually so called, or in that of *bog spavin*, *thorough-pin*, &c. So connected are the two, as cause and effect, that whenever a horse presents himself exhibiting windgalls, we at once pronounce him to have “done work.” And yet, by no means infrequently are brought before us young horses—horses that have never been broken or backed even—having bursal swellings, not so much in their fetlocks as in their hocks: bog spavins being any thing but rare occurrences among them. And these have manifestly arisen in the absence of work.

IN THE YOUNG OR UNWORKED HORSE bursal swellings are said to arise from “weakness.” The interpretation of which appears to be, that the joints—with which the bursæ are so generally connected, and with which in some parts they make common cavities, are in many a growing animal physically too “weak” even to support the weight of its body; and the consequence is, they *bulge*, i. e. the capsular ligament becomes distended and stretched, and ultimately has its cavity considerably enlarged in consequence of communications being established with the tumefied bursa or bursæ in its immediate vicinity. This is what happens in *bog spavin*; the form of windgall to which young horses are especially subject. To this may be added, as another link in the causation, the manifest disposition existing in the constitution of the young subject to augmentation of secretion as well as to effusion: his capillary system seems ever exuberant—ever ready on the slightest provocation to relieve itself of the plethora natural to it at this season of life in the emission of either serous fluid or synovial secretion or coagulable lymph, dependent on the nature of the exciting cause, and the part on which it is operating. For instance, if there exist a general plethora of the system, or a disposition from laxness or “weakness” of the capillaries generally, to effusion or secretion, the legs and sheath, being the lowest or most dependent parts, will tumefy and become enlarged; on the other hand, if the joints or bursal cavities receive weight or motion beyond their powers to withstand, or which becomes the source of any increased arterial or hypertrophic action in them, then will the synovial secretion become augmented, and bog spavin or some other form of windgall be the result. But

IN OLD OR WORKED HORSES WHAT CAUSES WINDGALL? If weakness of fibre in the young animal be a local cause of windgall, overstretch or strain, from intensity of force or repetition of motion beyond the powers of the parts, may occasion the same thing in the adult or perfectly formed animal. Work tells upon no parts more than it does upon the joints. We witness this in the trembling knees

and knuckling-over fetlocks of aged horses, and horses that have performed a good deal of hard work, as well as in the shambling, shuffling, bone-setting gait they in consequence get into; and we see what are generally received as unerring signs of it in the windgalls upon their fetlock joints, upon either the fore or hind legs, according as the nature of the work they have been doing has called the one or the other most into action.

But distended and enlarged bursæ exist in situations where there are no joints, and where the bursæ can have no connection with any joints. On such, work operates in a different manner. Continual forcible tension or strain upon any muscle or tendon has the effect, through the extraordinary pressure and motion conveyed to it, of producing excited action in the capillary system of the bursa or bursæ such muscle or tendon plays over, the ordinate result of which is a distended or hypertrophic condition of such bursal structures. Bursal swellings of this description now and then occur upon the arms and hands of men, and are very apt to happen with laundresses in particular, in consequence of the exertion they are obliged to put their arms and hands to in washing. We remember to have seen a washerwomen's arms and wrists literally beset with such tumours. We took the opportunity of making some inquiries of her concerning them. She disavowed feeling any pain, or indeed experiencing any inconvenience from their presence; neither would she admit that they in any manner or degree detracted from her physical strength of hand or arm. Two inferences appeared deducible from this human case. One was, that the windgalls—*ganglions* as they are called by surgeons—had their origin in hard work; the other, that numerous as they might be, and in the instance mentioned were, they were productive neither of pain nor inconvenience, nor even diminished power. And when we come to apply these facts—for facts as respect windgalls *generally* they appear to be—to horses, we cannot but form opinions in our own minds somewhat at variance with the notions entertained by the horse public on this score.

IF WITH THE PREDISPOSITION OF THE YOUNG ARE COMBINED THE CAUSES which produce windgall in the old or worked horse, the joints and bursæ may naturally be expected to give way. Parts incompletely formed, but growing into the strength and stamina they are intended one day to possess, cannot bear usage which to adult limbs is only healthful exercise; and therefore it happens that four and five year old horses, prematurely taken to be ridden or driven hard, or to be overworked in riding schools, exhibit bog spavins and thoroughpins so frequently, and now and then windgalls (commonly so called) as well. In fact, the young horse, and, in particular, such a one as is large and long

limbed and large jointed, when taken into work may be said to be the especial subject of bursal swelling; and it is rare when such swellings have once become developed for him to get rid of them. They remain as evidence of his having been "put to work too early," and are apt to operate on the public mind to the depreciation of his value.

THE CAUSES OF WINDGALLS, then, may be set down to be, in general, such as come under the denomination of "hard work." The stretch, the strain, the sudden shock, the continual squeezing and rubbing, the bursæ of such joints as the fetlock and hock are subject to; the stretch and occasional laceration the fasciæ bracing and supporting the bursæ experience; the strains and contorsions to which joints are so obnoxious—all these, to say nothing about incidental injuries, such as falls, blows, &c., must be reckoned as so many causes, direct or indirect, of windgall. At the same time it must be borne in mind that in particular forms of disease—to be hereafter specially considered—particular causes will be found operative. Other causes are mentioned. Hurtrel d'Arboval says, that continued exposure to cold and moisture, in marshy pastures, will produce windgalls; and he is strongly in favour of the old notion, that they are also caused by the steeply inclined standings in stables in which horses, for the sake of appearance, by dealers more especially, are kept for many hours together confined by having their heads racked up.

[To be continued.]

CASE OF DISEASED KIDNEY AND RUPTURED STOMACH.

By JOHN TOMBS, M.R.C.V.S., Stratford-on-Avon.

Sept. 22, 1848.

AN aged half-bred horse, belonging to a respectable miller of this town, went a journey of twelve miles this morning: on his return home, at 2 P.M., to eat his bait of bran and beans as usual at 4 P.M., he was observed to be ill. I saw him at 5 P.M.: he was lying down, groaning, and looking back towards his flanks. When made to get up, he extended his extremities to their utmost limits, crouched his back and loins, unsheathed his penis, and strained violently, and expelled small quantities of urine. Countenance dejected; pulse 60, and hard. I apprehended a calculous affection of the urinary organs. Prognostication unfavourable. Bled largely, and gave opiates. At 8 P.M. I saw him, and found the

symptoms increased tenfold in severity: pulse quite imperceptible; tongue furred; mouth full of frothy mucus; eyes dull; pupils dilated. When standing, he crouches as before; groans piteously and loud, when voiding small quantities of urine. I examined the perineum and penis, but could not detect any calculi. I then passed my hand up the rectum, and found the *fæces* pultaceous; no heat of bladder, and quite empty. I could readily pass my hand into the colon, which I did to ascertain if a portion of it was forced into the rectum, and thereby entangled; but such was not the case. I was satisfied there was not only an affection of the kidneys, but a bowel disease likewise, either from entanglement, intromission, or a rupture of some of the abdominal viscera, from the excessive groaning, straining, and heaving of the animal when down: he lay on his side, stretched out his hind legs, and strained more violently than any mare I ever saw in acute labour pains, and the same muscles were called into action. It being quite a hopeless case, the suffering animal was destroyed at 9 P.M.

A post-mortem examination was made next day. The stomach was ruptured, and its contents had escaped into the cavity of the abdomen; patches of inflammation on the colon; small intestines, and cæcum healthy; the right kidney gangrenous, and contained several minute calculi; the left kidney slightly inflamed; other viscera healthy.

I inquired of the attendant whether the horse ever appeared uneasy when in the stable: he said he was often "shuffling about with his hind legs," but that he attributed to lameness of the fetlock joints, for which I had fired him two years since. No doubt the restlessness was from pain in the loins. The impression on my mind is, that the subacute pain in the kidney became suddenly acute, and the animal, in violently attempting to void the offending matter lodged in the ducts of the kidney, burst the stomach, that viscus being distended with half-digested food. Had it not been engorged, the probability is that it would not have given way, and the animal might have existed some time longer, although the disease of the kidney had been of long duration; but he had not experienced much inconvenience from it, as he was in good condition. The enlarged and thickened bursæ of the flexor tendons contained a considerable quantity of black thick matter which communicated with the tendons. He was lame when going down hill in the shafts.

Oct. 13, 1848.

* * On perusing your excellent description of lameness in horses, I find you take a very correct view of ring-bone, in stating that lameness seldom precedes the appearance of the ossific

deposit. My late father met with but *one* case during thirty-seven years' practice, and that was situated in the fore coronet: the lameness was manifest three months before ossification took place, and was excessive the last month before the bony substance was visible. I have met with one case only, and that was situated on the coronet of the fore leg; great lameness from the first; substance high up, and visible six weeks after the lameness appeared.

VERMIFUGE VAPOURS.

ETHER, CHLOROFORM, OIL OF TURPENTINE, OR RECTIFIED OIL OF AMBER, USED SINGLY OR COMBINED, EFFECTUAL THERAPEUTIC AGENTS FOR THE DESTRUCTION OF STRONGYLUS AND FILARIA IN THE BRONCHIAL PASSAGES OF CALVES, THROUGH NASAL INHALATION.

To the farmer nothing is more detrimental to his young stock, while frequently attended with serious loss, than filariæ or worms that infest the windpipe in young animals; so abundant are they occasionally, that they nearly choke up the windpipe and air tubes. The cough induced by filariæ differs in symptom from common catarrh: the hoose or cough dependent on parasites in the windpipe is subitaneous and spasmodic, being as abruptly left off as it was sudden in coming on, and evincing an apparent desire on the part of the animal to dislodge something from the epiglottis. From the periodicity of the cough in this disorder we might reasonably infer that it depended on the worms irritating the epiglottis; for, the irritation being removed, the hoose instantaneously ceases, and the calf will immediately run and gambol about as soon as the cough subsides, until again annoyed by a fresh irritation. You may frequently see calves worn down almost to skeletons by irritation in this disorder, yet are lively, active, and retain their appetite. These symptoms differ from common cold or catarrh, in which the animal is dull, feverish, disinclined to move about, with a cautious cough, hurried respiration, loss of appetite, with coryza and defluxion from the nose.

In administering the remedy, the method is to slightly elevate the head of the animal, and pour about two fluid drachms into each nostril, and allow it to vaporize: it will then, by the means of respiration, be disseminated through the air-passages, and thus destroy the filariæ. In some cases it must be repeated two or three times, but once has frequently the desired effect; and the relief

so suddenly obtained seems magical to those who have borne testimony as to its beneficial operation. This plan and method of using some of the agents were made known by me in that excellent periodical, the "Farmer's Magazine," in the year 1840, in which a full account is given. Young stock in the county of Devon is peculiarly prone to this malady, there being so much low marshy land, small enclosures, and hedge fences; complete hotbeds for the development of every kind of ova or filarial life.

Your's obediently,

ROBT. READ, V.S., Crediton, Devon.

W. Percivall, Esq.,
Editor of THE VETERINARIAN.

OBSERVATIONS ON LAMENESS IN HORSES.

By WILLIAM GAVIN, M.R.C.V.S.

To the Editor of "The Veterinarian."

Dear Sir,—HAVING perused your valuable article on shoulder lameness, in the THE VETERINARIAN for July, with great interest and profit, allow me the liberty of a few remarks suggested by it. The accurate diagnosis of lameness is certainly a very important branch of our profession; and although we have many and useful rules for detecting it with certainty, it is much to be wished that we had more. It is with the conviction of the justness of your remark, that "Nothing but steady observation, and faithful and frequent report, can clear up these matters," that I take up the pen, hoping to benefit and be benefitted. There is one saying of Solleysell's regarding shoulder lameness which you quote, on which I hardly think much dependence can be placed, and perfectly agree with you, that we must have other marks of distinction. The observation I allude to is the following:—"The usual way to know whether the grief be in the shoulder or foot, is to observe whether the lameness be increased or abated by exercise; for if it be in the shoulder, the horse will halt least while he is heated with riding; but if in the foot, he will halt most when he is ridden." Now, I have known horses lame from quittor go sound when "heated with riding," and the same with those suffering from navicular disease. Here I may observe, that authors and veterinarians have got into a habit of writing and speaking about navicular *joint* disease, till the veterinarians who see the objections to the term use it from the authority custom has given it, and for

the sake of being clearly understood. The fact is, the disease in question has seldom or never any thing to do with the navicular *joint*. A joint is an articulation between two bones, and this disease is situated between the external surface of a bone and the internal surface of a tendon, and cannot be called a *joint* disease at all.

To return. A better distinction might be, to consider that lameness in the foot is most plainly shewn when the foot comes to the ground, and weight is imposed on it; and in other parts of the limb when the foot is in the air, and the limb in the act of motion: strains in the flexor tendons, &c. must be excepted, and perhaps small fractures in the bones.

I observe that, in your enumeration of causes, two have escaped you, which, however, you have noticed in previous numbers of your valuable work; viz. Rheumatism, and that arising from disorder of the liver; but your previous notice has made them so plain that they require no comment. As to the mode of treatment recommended by De Nanzio of Naples, I cannot conceive on what principles it is advocated. It is now held as a rule in medicine, that counter-irritation, as such and to be of service, must neither be too far away from the diseased part, nor too near it. And a budding-iron, applied even leniently to the *immediate* coverings of the joint, must aggravate the inflammation in the capsule very much, or, more likely, produce sloughing. Chronic inflammation of the capsule of a joint is not of that kind which has a tendency to resolution on the existing inflammation being raised to a higher grade; and I conceive the benefit the Professor saw in the practice resulted from the suppuration of the wound, and not from the application of the cautery to the capsule.

In the treatment of shoulder lameness by setons, after blisters have failed, it is a common practice to allow them to stay in for weeks and months, with the delusive hope of benefit. The object for which the seton is inserted ought to be, to bring a large amount of plastic fibrine to the part, and thus provide the materials from whence new muscle may be formed. This the seton certainly accomplishes in the first instance; but when it is allowed to remain in the shoulder beyond the period when the swelling is on the increase, the object of its insertion is rendered comparatively useless; for the track becomes lined by a pyogenic membrane, and the plastic material is crumbled down into pus. The additional blood which the irritant draws to the part only serves to keep up the suppuration, without in the least advancing the formation of new muscle. The only way to derive benefit from the operation is to put in two or three long setons, and remove them when the swelling is at its acme; to then wait for the organization of the

fibrine, and in due time repeat them (the setons) if necessary. Blemish is one of the things an owner is always anxious to get rid of in this disease; since, even although the horse gets sound, the wasted shoulder sinks him in value. Still, the repeated insertion of setons will not mark him so much as one that is allowed to remain in the shoulder a very long time will do.

Your's truly.

24th Sept. 1848.

A NOVEL METHOD OF CASTRATION.

By E. B. DAWSON,

Veterinary Surgeon 4th Madras Light Cavalry.

12, Regent Street, City Road.

Sir,—THE enclosed is on a novel mode of castration, adopted by a young friend of mine in India: if you think any part of it would be interesting to the readers of your valuable Journal, you are at liberty to make whatever use of it you may think proper.

I am, Sir,

Your obedient servant,

JOHN BRODERICK, V.S.

To W. Percivall, Esq.

Bangalore, August 21st, 1848.

My dear Broderick,—A FEW months since, the Commander-in-Chief, desirous of ascertaining whether geldings would not answer for cavalry regiments as well as entire horses, the latter being at times extremely vicious and savage, our regiment was selected for the experiment in this presidency; and in carrying out his Excellency's view, I have adopted, with perfect success, a novel method of castration, which I now lay before you, and hope to receive in return your valuable advice and opinion on the subject, which, my good friend, I much cherish, having always found it of the greatest assistance in my professional career.

I shall briefly state my *modus operandi*, the peculiarity of which is, scraping through the spermatic artery, instead of burning, &c., and shall term it

Scalpeus Castrationis Methodus.

After securing the horse, cutting through the scrotum, and drawing out the testicle, uncovered, in the usual way, divide the vas deferens pretty high up; take hold then of the vascular part of the cord, with testicle attached, and spread it out between the thumbs

and fore fingers; by so doing, the spermatic artery is somewhat elevated; now press the finger through the fascia, immediately underneath the artery, and divide all below with a scalpel, leaving little or nothing but the artery remaining: afterwards take hold of the testicle, and with a large knife, with a slightly roughened edge (common post-mortem or table knife), scrape through the artery, turning the edge of the knife (as the horse lies) downwards, and slightly inclined towards the belly. The movement of the knife must be rapid, and about four backward and forward motions will do. Give then a dash of cold water, and lead the horse to a stall well littered. Sometimes a few drops of blood fall for about half an hour, seldom longer. Keep the animal quiet; give him his grass or hay, and half a feed of corn; maintain him standing the first day, but let him lie down the next; exercise half an hour morning and evening; gradually increase feed and exercise.

A system somewhat similar was introduced by Mr. Jennings, late V.S. of Artillery, who, whilst at the Cape on leave, saw it performed on colts by a farmer. But the manner in which he saw it done, and afterwards practised it, was scraping through the whole cord: this, I need not say, is a disgusting and fearfully tiresome operation, especially in old horses; for when you get half-way through the cord you cut a little, and just in the wrong place, it being impossible to see the artery, and then you have the blood spirting in your eyes the remainder of the time. Mr. Western, V.S. of the Body Guard, was of the same opinion as myself. I was, nevertheless, struck by the manner in which those horses I operated upon recovered, shewing little or no pain, leaving the "sick lines" cured, and in as good condition as when they entered; so I tried it on my present plan, and with complete success. The operation takes me from one minute to one and a-half, from the time I make the first incision to the horse being on his legs again. Of course, with adhesion of the vaginal covering it takes longer. I have castrated on my new plan 270 horses in my own regiment, about fifteen daily, and every horse has done well. Ten by caustic clams; two by firing (one died); two by ligature (one died); and six by torsion, altogether 290; and besides my own regiment about twenty in the Artillery, on my "scraping method," and every case successful. Messrs. Crundall, Crowley, and Field (gentlemen who have been doing duty with me) can all perform the operation equally as well as myself, and are delighted with its simplicity and cleanliness; for you need hardly soil your fingers. I think gelding must be a safer business in India than at home; for our old horses do quite as well as the young. I have cut some eighteen years of age, thirteen of which have been passed in hard regimental duty. Of the 300 above alluded to, most were aged: thirty-six averaged

sixteen years, and all of these did well. It may be in place here to say, that in one or two cases the dropping of blood increased, and I found it necessary to introduce small pieces of tow up the scrotum as the horse stood. I fear you will consider me too prolix, and somewhat egotistical, when I tell you, that I have been honoured with the approbation of the Commander-in-Chief, for—to use his Excellency's language—"the ability and care evinced in carrying out the important duty that devolved upon me." This is flattering; but I attribute my success entirely to the system I adopted; and feel convinced, taking into consideration the age of my patients, heat of climate, and many other circumstances, that the old plan would, in numerous instances, have been attended with fatal results.

.Believe me, dear Broderick, &c.

MEGRIMS.

By JAS. BROAD, *M.R.C.V.S., Market-street, Paddington.*

To the Editor of "The Veterinarian."

Dear Sir,—IN accordance with your request I avail myself of the pleasure of addressing you upon the subject of "megrim," a disease to which I alluded in a letter of June last. In so doing I beg to apologize for my neglect in not replying to your note before. I then alluded to the collar as being the most productive agent in causing the affection; yet I am quite prepared to admit that it arises from other causes, and that, doubtlessly, it occasionally occurs to saddle horses, although I have never had an opportunity of witnessing it under such circumstances; but your authority alone is quite sufficient to rank saddle horses as being the occasional subjects of it. I am ready to admit the bearing rein to be sometimes the cause; but nearly all of our cases have occurred in horses not wearing them. I have had no reason to consider fat horses peculiarly subject to the disorder, or, as described by the late Mr. Youatt, the horse that is "fat and full of blood." I cannot understand that the fat horse's circulation is more rapid or forcible than that of the horse in leaner or working condition, which his observations would appear to imply; at least, all the cases that have come within my notice have been to horses in good working condition, and some few rather below that much-

desired point. Since I last wrote to you upon the subject I have taken every opportunity of inquiry with reference to the cause, with the view of ascertaining whether I had thrown too much stress upon the collar's producing it, and, I believe, I may say not: at all events, the following cases will appear to shew that I have not.

Mr. Woodger desires to take the present opportunity of making the remark that, in the majority of instances, his views of the principal cause of megrims perfectly coincide with my own, and that he is likewise unable to bring to memory, from twenty-four years' practice, a single instance of the disease having occurred to a horse when ridden. There is one case that has recently occurred to his notice favorable to the views we take of the leading cause. The horse belonged to Mr. Hardwick, of Hammersmith. He had been in his possession for upwards of four years without shewing any tendency to the disease, until last Epsom races, on which occasion he was one of four selected to go to the races with a four-horse coach; on which particular day the horses all appeared in new harness, and this one, in the course of the journey, suffered a somewhat severe attack of megrims. For it he was bled in the mouth and from the jugular vein, and for the next five or six successive days he continued to shew symptoms of it, when Mr. Woodger's attention was called to him. He prescribed a dose of purgative medicine, and from learning that the horse had never before going to the races been subject to megrims, he was necessarily led to look to the collar rather suspiciously, and he found it to be too tight. Now, the horse was wearing his new collar at the time of every attack. Mr. Woodger, therefore, ordered that when again worked he should wear his old collar, which he did, and has continued so to do up to the present day, without having shewn the slightest appearance of megrims.

Mr. Hartley, of Walham Green, some four years since purchased a fine looking-horse at one of the repositories, which was occasionally ridden, but more frequently driven in harness. He soon became the subject of megrims, and to such an extent that he was obliged to sell him. This horse never exhibited the complaint with the saddle. He was frequently seized in the evening by gas light.

Mr. Price, of Paddington, some short time since possessed a horse very subject to it, at any season, hot or cold, by daylight or by gas light. I have noticed that the majority of horses subject to it carry their heads high. We had a horse in our own possession some time since, which Mr. Woodger had had nine years. Towards the latter part of that period he began to be affected with the disease in harness; sometimes it was quite dangerous to sit

behind him; he would be so suddenly attacked, and would then violently plunge across the road, against any thing that happened to come in his way. He was a beautiful horse to ride, and he never shewed the least indication of the disorder with saddle. He was, in consequence, sold to a gentleman of this parish, exclusively for saddle purposes; since which he is dead, and I have his skeleton now by me.

A gentleman, in this street, possesses a horse who exhibits symptoms of the affection precisely analogous to the last mentioned case. He never falls; sometimes shakes his head rather furiously, and if he is only pulled up for a short time, the uneasiness all passes off. He has never shewn the disease while ridden.

If I have made it appear that the collar is the principal cause of megrims, it is well known that many cases occur quite independent of this cause; but when the collar does prove the cause, how does it act to do so? My views are, that the continued pressure upon the jugular veins partially obstructs the passage of blood through them, and that thereby the venous blood becomes confined too long in the brain, and probably the arterial ramifications become gorged in consequence. In all probability there is, in many cases, some derangement, either structurally or functionally, of that organ, which we are little acquainted with. I will not further trespass upon your valuable time by my crude remarks; and therefore, permit me to remain, dear Sir,

Your's respectfully and obediently.

P.S.—I should take it as a favour to be obliged with your opinion on the above.

FRACTURE OF THE NECK OF THE THIGH BONE.

By W. YOUNGHUSBAND, V.S., Greysloke.

Mr. Editor.—I THIS time presume to forward you two cases of what I believe to be in the animal kind a rather uncommon occurrence; and that is, *fracture of the neck of the thigh bone*.

THE FIRST CASE was a small pony, aged, belonging to a widow, that was found to be lame in the off hind *limb or quarter*. Cause obscure. It took place out of my circuit; but through the advice of a medical gentleman, a friend of mine, from whom I have at times received some useful information, my opinion was required. On viewing the patient at a short distance, and having her passed slowly before me—I say, from this simple superficial examination,

I was almost led to believe that it was a severe sprain of some important muscle or muscles of the thigh; a belief in which my medical friend was quite willing to join me. Well: so far so good; and I believe if we had given our verdict accordingly all would have passed off right, since some of the knowing ones had come to the same conclusion. But we now had the animal caught to be well examined throughout the entire limb. We could find nothing to alter our opinion, and were just going to leave in that careless, slovenly manner from which arises so many curious pictures in ———. At this time another thought struck my mind. I now had the limb lifted off the ground, and examined it more minutely, and by placing my ear in contact with the thigh, and moving the leg in a rotatory manner, I discovered a *crepitus* at the neck of the thigh bone; and from this circumstance gave it at once as my decided opinion that the bone was fractured. My friend now placed himself in the same position, and at the same time by moving the limb, he distinctly heard the crepitus also, and rejoiced at the discovery, though exclaiming at the time “the case was hopeless.” In this I concurred; and as we saw no probability of doing much good from manual interference, the animal seemingly not suffering much pain, and continuing to graze freely, and the parts not being much swollen nor attended with much heat, we came to the conclusion only to use such means as would allay any irritation that might take place, and would abate any existing inflammation.

AS TO OUR PROGNOSIS, I do not know whether it became verified or not; but the pony got on well, needed very little attendance, and can now walk, apparently, as well as ever; though I must state that, as soon as it is made to trot, there is a decided limping, accompanied with a little eversion of the limb. In other respects, however, all seems to be right. The accident happened in May last, and the animal is now capable of slow work.

CASE 2.—This case occurred in September last, and would not have been noticed so soon but as an accompaniment to the above. It happened thus:—A four-year-old heifer, along with some others, brought out of the field in which they were grazing, and in so doing lamed herself in the off hind limb, appearing as if she had sprained the part; but not shewing intense lameness, little further notice was taken of it for a few days, not until more urgent symptoms began to shew themselves; such as severe lameness, swelling, heat and pain in the part, loss of milk, want of appetite, &c.

Sept. 4th.—My advice was required. On arriving at my patient's, and being a little more on the alert in consequence of the previous case, I felt better prepared to make an examination. I

soon succeeded in detecting a fracture of the neck of the thigh bone, and as such gave my opinion, for which at the time I did not receive much laudation from the bystanders. Nevertheless, the owner seemed quite satisfied with my decision; and I related to him the other case, at the same time letting him know it was any thing but a hopeful one; yet, if he would follow my advice, I would not mind inconveniencing myself, from the interest I took in the affair. To this he gave consent; so, the first step I took was to bleed; the next, to have an active purgative administered, which was to be repeated if required. Cold lotions were to be applied to the inflamed part, and the usual antiphlogistic regimen required in such cases, to be adopted. The animal was to be kept in as perfectly quiet state as circumstances would admit. By these means, in a few days, she was so much improved that she ate and drank with avidity, and gave a fair quantity of milk; the only repetition used being the lotion, which had to be applied frequently, as the inflammatory swelling was with difficulty kept down. No other symptom has presented, and at the time of writing this paper the cow is apparently doing well. She walks with very little lameness (while still in her box); but there is a deficiency in the plumpness of the muscles of the thigh, compared with the healthy state. This result was not apparent in the pony, otherwise I see no cause to fear a happy issue, which I shall not fail to report at a future time.

Now, as to broken bones I have read a good deal, and have heard a good deal about them, and I have seen a good deal of them; yet, I must frankly confess, I have a good deal to learn, so that I cannot come to any fixed conclusion as to the treatment. But in cases like the above, so far as I have been concerned, excepting the antiphlogistic treatment, I certainly will coincide with the maxim in Mr. Key's case*, viz. that *the less there is done in these cases the better*.

CASES OF PROLAPSUS OF THE BLADDER AND PURPURA HÆMORRHAGICA.

By WM. COX, *M.R.C.V.S., Ashbourne.*

THE cases of *prolapsus cystis* in animals which have hitherto appeared in the pages of THE VETERINARIAN are but few, and those few have tended to produce upon the mind of the reader an unfavourable impression as to the ultimate recovery of animals similarly affected.

* Vide "Lancet," 1829-30, p. 228.

During the summer of 1845, as I was riding past Ketcham's Inn, I saw a crowd of men surrounding a mare in a field. I went over to them, and found a mare, the property of Mr. Harris, unable to foal. The legs of the fœtus were protruding, and the head was turned back. My services not being solicited, I passed on; but, before doing so, I pointed out to Mr. Harris the urinary bladder of the mare, which was hanging out from her vulva.

In about six hours afterwards I was called to see this mare, and found the foal had been extracted by Mr. Harris and one of his neighbours, and the bladder returned. This mare did well, *so far as prolapsus of the bladder went.*

CASE II.—In the month of June last I was sent for to assist a mare to foal, the property of Mr. Langford, of Waterfall, a village eight miles distant, situate midway between Leek and Ashbourne. On examination, I found the fore legs of the foal protruding, and the head turned back, as in the former case. But this was deformed, the neck being crooked, and was become a fixture. The urinary bladder of the mare had likewise made its appearance. As various attempts had been made by others to bring the head of the fœtus into the natural position without success, I determined at once to dissect away the fore legs and shoulders. This was done, and the head afterwards brought forward with hooks, &c. It took me just twenty-five minutes to accomplish all this, and bring the foal away. I returned the bladder several times during the operation, but the throes of the mare instantly protruded it again.

The foal having come away, I once more proceeded to return the bladder; but, had I persisted in the attempt, it is my opinion she would have died under my hands; I was therefore obliged to leave Nature to herself. The bladder had become as red as blood, from congestion. I ordered that the parts should be constantly fomented with warm water containing a solution of opium. Anodyne medicine was administered—purges and diuretics avoided as dangerous—the regimen bran mash—the beverage water-gruel; and, the mare's comfort and quietude being attended to as much as possible, I left her for the night. On the following morning I found the urinary cyst had returned to its natural site, and that she voided her urine naturally; in fact, the mare altogether was doing well, and she ultimately did well under the treatment that had been pursued.

Remarks.—It may be doubted by some, whether it was in reality the urinary bladder which made its appearance in these cases. I am confident it was in the latter, the entire placenta having been immediately removed after the foal. All the cases of this kind that I have met with have been in the mare and sow, having never seen one in the cow, sheep, or dog.

CASE OF PURPUREA HÆMORRHAGICA.

On the 7th of June last Mr. Stafford, of Kniveton, sent for me to see a mare that was suckling a foal, and had been in a field with some cows that had the vesicular epizootic, and she herself had begun to exhibit it. Being out at the time, it was 11 o'clock P.M. before I could see this rare phenomenon. On examination I soon discovered the purple spot upon the conjunctival and buccal membranes, and that the membrane covering the vagina was likewise covered with them. The pulse was about 80, but of such a character as would not tolerate blood-letting. The appetite was gone; and there was hanging of the ears and head—saliva drivelling from the mouth—slight cough—difficult deglutition—slight staggering when moved—the urine scanty and high-coloured—the fæces pultaceous—respiration not much accelerated.

The owner had bled her largely before my arrival. A diffusible, stimulating draught was administered. Having to attend another case in the neighbourhood, I called to see the mare about six o'clock the next morning, and found her in the agonies of death. On my return I made a post-mortem examination. As soon as the skin was removed she was found to be spotted all over like a leopard, both inside and outside, the spots varying in size from a pea to that of a crown-piece. The heart, also, was very much spotted.

This mare was soon dead after I first saw her. She was at work on the 2d, and sweated very much. She had been perceived to be unwell for two days previous to my seeing her, but was not thought to be dangerous until the night I was sent for.

In your last VETERINARIAN the subject of bleeding was mooted. It is my opinion that there are more animals destroyed than saved by the practice: the death of the above mare was hastened by it. Dr. Dickson, in his "Fallacies of the Faculty," says, "the Lancet has destroyed more than the sword." But, for my own part, I am not prepared to "go the whole hog" with him, and lay aside bleeding altogether.

FURTHER REMARKS ON REGISTRATION.

By ARTHUR CHERRY, *M.R.C.V.S.*

To the Editor of "The Veterinarian."

Sir,—IN a letter I addressed to you, and which appeared in your Journal for September, I made some observations on the subject of Registration. These seem to have drawn some attention; and remarks have been made on them some highly eulogistic, others

of rather the opposite tendency. My object seems rather in some instances not to be clearly understood. I cannot for an instant be supposed to uphold an *unqualified* over a *qualified* man; but, at the same time, long inquiry into the position of and the previous history of our profession has taught me that there are a large number of practitioners who have been in practice for many years, who, having succeeded to a business in many instances carried on for several generations, pursued the methods and imbibed the practical lore of their progenitors: the sons of these, who intend to do as their fathers have done before them, became pupils at one or the other of our veterinary schools, and, in due course, members of the body corporate.

Viewing these things, it would ill become any man to cry down intelligence and honest worth, even though such a man may be a direct opponent: such a line of conduct would never answer; and, further, an amalgamation of the qualified members with this class, based on proper grounds, would do more to drive from the field the herd of pretenders, shoeing smiths, *et hoc genus omne*, which are now so plentiful, than any other plan that may be devised. For it will be found that this class to which I am adverting are, to a man, advocates for the advancement of our common art; and the very fact of their not enjoying the privilege of membership makes them feel the more on the subject.

Another class are those who have served apprenticeships to some practitioner, but afterwards, without entering at the schools, set up in practice for themselves: the best of these may be classed with the foregoing.

The last class I shall notice are those who have been educated at one or other of the veterinary schools, but have not passed the Board of Examination. Of this class I must not speak disparagingly, as to it I myself belonged for sixteen years, conscientiously refusing to present myself before a Board that, I believed, was not qualified to examine me efficiently on the subject professedly their object to test. That this arose from no personal feeling will be apparent, when I state that I had been a student for several years in the medical schools under several of those very gentlemen whose aptitude for the office of veterinary examiners I disputed. As medical and surgical teachers, and practitioners of human medicine, I respected them, and should have felt proud to have appeared before them for examination for a diploma in human medicine; but I could not understand why, for a veterinary diploma, I should be subjected to an examination more consonant with another and very different branch of medicine. But when a change took place, and a Board of Examiners was appointed, consisting of two-thirds veterinary practitioners of standing and repute, then the objection

I entertained against the old Board vanished, and I felt myself bound to appear before the new Board, and I did so.

It was during the period in which I persisted in not applying for a diploma from the old Board of Examination, that my attention was more particularly directed towards the consideration of the relative position of different classes of practitioners, the estimation in which they were held, and, in some measure, an inquiry into the practical merits of each. This matter, collecting through so many years, I have made use of in the investigation of the subject of registration; and it was the main cause, may be, why I have been so particular in my requirements on this head.

It was this inquiry also which has always led me to be the advocate of the country portion of our body; it has also led me to be more lenient towards others in my estimation of their acquirements. I was not biassed in favour of those who had been taught in any particular school, nor bigotted towards those who did not happen to be certificated members of either of them. Of the schools themselves, I well knew their errors and deficiencies—perhaps few persons better: yet I was not their enemy; I wished to see these errors corrected, and the deficiencies removed. For this I have striven, and for this, so long as it is called for, will I battle. I have never sought to injure, but to uphold; and however much many of my actions may at the moment appear to tend towards opposite points, it is only apparent: the same motive guides in all. For more than twenty years have I pursued the same course; and after so long a trial, not to find that I have been in error is, I think, sufficient cause for my persistence in the same course of policy.

To all quacks and pretenders, whether without particular designations or with high-sounding titles and professions, I am an uncompromising opponent; but I cannot, merely for the sake of a form, situated as we are, disparage merit, be it where it may. I have, therefore, stood forward as the advocate of the honest, the true, and the good; nor do I care for the praise on the one hand or the blame on the other for my having done or still continuing to do so.

There is in your last Number an attempt at description of a new plan for hobbles, at which, coming from so good a quarter, I must confess that I am surprised. I must admit that I do not understand it; and I am not alone in this predicament. I have been asked by several practitioners the question, if I understood it, as they were obliged to admit they did not. I am sure this is only the result of hurried writing. There is one word, “Cottrel,” the meaning of which I have in vain sought: it is not in any dictionary that

I have been able to consult; nor has any one, after very numerous inquiries, been able to give me a solution. I may *guess* at the meaning; but in description one ought never to be allowed to guess at the meanings of the terms employed.

I am, Sir, your's obediently.

SOUTH AMERICAN HORSES.

To the Editor of "The Veterinarian."

Sir,—HAVING been interested about different breeds of horses for the Honourable East India Company, either for remount or for breeding, or for both, I some time ago wrote to a friend who had lived some years in South America for information about the horses of that country. The enclosed is his answer, which you are at liberty to send forth to the world in your Journal, should you think it worthy a place.

My friend, you will perceive, makes the candid and unusual acknowledgment, that, though he has had much traffic in "horse-flesh," his practical knowledge of the animal is very limited. Any imperfections, therefore, on his part are excusable. Nevertheless, his remarks must be looked upon as a very good general account of the horses in that country.

The horses of South America being possessed of very tender mouths, is similar to what they are in every semi-civilized country. It would appear to be an anomaly to some travellers, but no wonder at all when the serrated bits are examined.

I remain, your most obedient servant,

T. ASTON, V.S., Madras Light Cavalry.

43, Bedford-row, Holborn, Oct. 2, 1845.

Extract from a Letter of a Friend who had lived some Years in South America (principally at Valparaiso).

(COPY.)

WITH reference to the subject therein referred to, I am afraid I cannot give you that satisfactory information you require. I have during my sojourn in South America had a good deal of traffic in "horse flesh," but my practical knowledge on the animal is very limited. I always found the horses of Chili to be superior to

those of Peru, both in appearance, strength, and action: they are generally smaller than the English horse, and have a very heavy appearance, approaching to something like the dray horses used with us; they are bony, and universally possess a property (highly esteemed by the Chilians), a broad chest. I considered them somewhat vicious, though the "Guasos" pride themselves on being good trainers. They have a custom of training all first-rate horses to jump off at the time of mounting, and with persons unaccustomed to this, accidents often occur, and to which I have, on many occasions, been an eye-witness. I cannot give any reason for this custom; they are very tender-mouthed, from the very severe bit used in the country, and which you may probably have seen or heard speak of; so much so, that a horse at the height of his speed can be checked with the little finger. It is a most beautiful sight to see the quickness with which they obey the reins, the slightest check of which brings them completely on their haunches. They never commence training them until four years of age and upwards, and to this circumstance I attribute their lasting qualities. The journey between Santiago and the Port of Valparaiso, a distance of thirty-three leagues, over an indifferent road, with two very high mountains to pass, is daily performed on one horse in ten to twelve hours. During my stay in Chili, the "Mary Ann," a large East India ship, sailed from Talcalmano (a port in Chili to the southward of Valparaiso) for New South Wales, with a cargo of horses and mules, but, owing to the very tempestuous weather she encountered on the voyage, was obliged to throw the whole overboard, and, I believe, arrived at her destination without a single animal on board: this is the only shipment from the country I ever heard of. If you should entertain any serious intention to possess yourself of the Chilian breed, I would recommend the southern parts of the country, from whence the best horses are always procured, say Concepcion. A most celebrated place for first-rate nags is Rancagna, about twenty-five leagues to the southward of Santiago. The price of a good horse is from four to six doubloons*; but much higher prices are paid, and I have known as much as thirty doubloons paid for an entire horse: the generality are, however, "cut," and mares are never used for the saddle, the natives having a prejudice against them. Their daily food consists of clover, with a couple of feeds of chopped straw, and oats or Indian corn, and on which they can stand any work.

Owing to a peculiarity they have of raising and throwing out their fore feet, swellings in the fetlocks are very common; but I

* Doubloon = 2 pistoles; a pistole = 17 shillings.

never found this circumstance to interfere materially with them until very aged. The most general colour throughout Chili is dark bay and brown ; there are also a good many greys and duns, but few black. In Peru I have had and seen some excellent horses, capable of heavy work ; but I do not like them near so well as those of Chili, nor do I think the breed is any thing to compare with the latter ; they are quite different, and, generally speaking, have but one pace (ambling I think they call it), and are only fit for ladies and long journies. Salta, a city under the government of Buenos Ayres, is a celebrated place for horses, of which I have seen some very first-rate, and, being a nearer part (say Buenos Ayres), could be procured at less expence.

A FEW REMARKS ON COLICKY COMPLAINTS.

By WM. GAVIN, M.R.C.V.S.

To the Editor of "The Veterinarian."

IF space will permit, allow me the favour of a few remarks on those diseases having colicky pains for their prominent symptoms, suggested by the perusal of your interesting case of constipation, in last month's Journal.

There is no class of diseases calling more imperatively for accuracy of diagnosis than these ; and this is a point which I am afraid veterinarians in general do not sufficiently estimate. To the public, *cure* is every thing (or rather, I should say, successful treatment as we treat diseases, and cure nothing). To the veterinarian, diagnosis is, or ought to be, the same ; and if a solid reputation is to be built on any thing, it will be on the habit of accurate diagnosis and prognosis. It is this which renders the veterinary profession so infinitely superior to the sister one, so far as difficulty is concerned ; and if the merits of the surgeon and veterinarian are to be measured by the difficulties they respectively overcome in the treatment of disease, the palm, without any hesitation, must be awarded to the latter. Unfortunately for us, Mr. Editor, the reward is measured by the value of human life as compared with that of the brute ; but this should not deter the veterinarian from constantly bearing in mind that the difficulties of his profession require he should be the superior man of the two.

A most important aid in diagnosing diseases of the intestines consists in an examination per rectum (and this, like pinching a horse's foot, ought not to be trusted to another), not merely for the

purpose of clearing the rectum, but also to ascertain what is the condition of the intestines, and, in constipation more particularly, the cause of obstruction. Some veterinarians, I am well aware, consider the operation a very undignified one, and if possible on their parts to be dispensed with. My reply is, soap and water are specifics; and were the trouble and annoyance a thousand-fold greater, it is worth while to perform it for the sake of the aid and benefit it confers.

Symptoms of colic are either primary or secondary, i. e., the result of pure spasm of the muscular coat of the intestines, or both the symptoms and the spasm, the result of some more serious disease. Examination per rectum will do much to determine this point, and it is an important one; and if constipation in addition appears as a prominent symptom, it will also throw great light on its cause, as, for instance, whether it be the result of spasm, of pendulous tumours, strangulated intestine, &c. Negative symptoms are useful, and these will be found, in the absence of all these causes. A knowledge of the state of the mucous membrane is useful, viz., wet or dry. The latter state I have found a common accompaniment of obstinate constipation, and the *fæces*, in such cases, generally partook of the same character, being dry, hard, and in round balls. This kind of constipation, I am inclined to think, frequently results from the intestinal secretion becoming suppressed. Another kind of constipation, having likewise colicky pains for prominent symptoms, results from over-loaded intestines; but the pain is less intermittent, and more severe when it does come on; and where the great intestines are the seat, they frequently lie quite back in the pelvis, and their weight upon the bladder occasions frequent and painful micturition: the great intestines seem to be those most peculiarly obnoxious to this form of constipation. By passing the hand up the rectum, you will be able pretty accurately to define the seat and extent of the mischief; the bowel also, on being pressed with the point of the finger, will remain pitted. You may thus satisfy yourself of the degree of impaction, and also pretty accurately of its nature. It is hopeless to expect recovery from such a case by the aid of medicine alone; mechanical means are of more service. The patient must be made thirsty, and induced to drink great quantities of tepid water, and walked about, for half an hour at a time, very frequently: pain must be met with antispasmodics, &c. Venesection is indispensable, but it must be most judiciously managed: we must lay our account with such a patient being ill for a fortnight, perhaps longer; and if the strength sinks in the mean time the animal will, in all probability, die, for the disease will outlive him. To estimate

the importance of venesection, I cannot characterise it better than by quoting the opinion of a talented professional friend :—" It is one of health's sheet anchors in the treatment of cases of obstruction." At one time I made a rule of endeavouring to do without it as much as possible, and I found that delay greatly increased the risk of an unfortunate termination, and invariably retarded the recovery of the patient, as well as increasing trouble and expence; the first to both owner and practitioner, and the latter to one of us. It relieves the congestion of the bowels, and greatly assists the action of medicine.

Linseed oil and ether are decidedly the best things to use, and aloes the worst, because, as long as it remains in the anterior part of the obstructed gut, its action is that of an unceasing irritant, and greatly assists the tendency to enteritis; besides, it is very nauseating and griping, and there is generally more sickness present than the practitioner wants. In inflammation of the abdominal viscera, or obstruction from hernia, it is literally a poison, and about as useful as turpentine in nephritis.

Where constipation is the result of dryness of the intestine, and the fæces are in dry, hard, small balls, the alimentary canal has difficulty in getting rid of them, on account of their small bulk; and I have found very hot water applied continuously to the surface of the abdomen of eminent service. In the case of a patient that had been ill a week, and was likely to die, I used it with complete success; but to be useful it must be sustained for a considerable length of time.

In cases where constipation is one of the symptoms of strangulated intestine from a pendulous tumour, or in analogous cases, where the cause can be accurately made out per rectum, I would strongly recommend, as well worthy of trial, the operation through the side for a somewhat similar disease in cattle, for the knowledge of which I am indebted to Mr. Collins, of Yorkshire. The patient, if not relieved, must die; and it affords not only a chance of life and usefulness, but a good one. I am warranted in saying so from its invariable success in cattle when performed in time. I never heard either disease or operation mentioned at college, but it is high time it was pointed out there.

I have seen constipation in cattle result from intense and sustained spasm of the bowels, where every foot or so of the intestine was contracted so as hardly to admit a finger, unconnected with serous inflammation, and accompanied with complete loss of sensation and volition in the hind extremities, the legs being placed in any position remaining so, but not permanently. As in such a case I have witnessed both sensation and volition gradually return, and the animal, with assistance, gain its feet and recover, I cannot

make up my mind as to the cause; but it would be awkward to prophesy fracture of the spine, and have the patient all right in half an hour.

For such a case, or where an effectual and instantaneous anti-spasmodic was required, I know nothing so useful as the anti-spasmodic prepared by Mr. Lyon, of Forfar. Administered to a horse labouring under colic, and before he has probably swallowed half the dose, he begins to pant and blow: every symptom of pain vanishes, and he remains free from it afterwards altogether, or for a longer or shorter period, according to the cause of the symptoms. Its effects are certainly very surprising and powerful; and had I any by me, I should be happy to send you some, Mr. Editor, as well as Mr. Mayhew; but I have no doubt, Mr. Lyon would supply any of the profession with as much as they chose, on being written to. Although I have used it, I do not know what it is; most probably some one or other of the vegetable alkalies.

In reading your case, Mr. Editor, I must adopt your doubt as to the advisability of using mercury and opium *at once*, for the relief of obstruction, &c.; and I am very doubtful that, had they been exhibited from the first in the present case, they would have failed to recover the patient, unaccompanied or unpreceded by your decided and judicious stimulant treatment. The case seemed to be one demanding time, and the aid of the biliary secretion; I infer so from the colour and nature of the dung. Perhaps the disease primarily arose from disorder of the liver. Recovery, I think, might possibly have been expedited by venesection at the commencement, although I have noticed that patients with disordered livers do not, in general, bear blood-letting well: in fact, there seems to be a decided intolerance of it, most probably on account of the deterioration in the quality of the blood.

I remain, most respectfully,
Your obliged servant.

OBSERVATIONS ON COLIC FROM INDIGESTION, ILLUSTRATED BY AN EXTRAORDINARY CASE OF IMPACTMENT OF STOMACH AND COLON.

By EDWARD MAYHEW, *M.R.C.V.S.*,
Spring-street, Westbourn-terrace.

I READ with much pleasure the case which you narrated in *THE VETERINARIAN* of last month. There were many reasons which made me happy to see that history. On looking over my paper which appeared in the September Number of your Journal,

it struck me that, though there were many passages contradictory of such an idea, the general tenor of the statement was such as might possibly lead the reader to imagine, I wished the public to believe I had hit upon a medicine which, like some quack nostrum, was applicable to every disorder, and never failed in establishing a perfect cure. My language was guarded, but the more pleasant features of the narrative were perhaps a little too conspicuous, and likely to overlay the caution which several sentences contained. I should have been more anxious to enforce that on which I only occasionally dwelt, had ether or chloroform appeared to me calculated to aggravate disease, or likely, in any degree, to be attended with danger. But when I wrote I had no knowledge their administration could do injury; and since then, though I have given both repeatedly, I am still impressed with the belief, that, if not in every case equally beneficial, in no instance are they, when scientifically employed, likely to be injurious. Here, however, let me qualify my assertion; begging it may be accepted only as a declaration of the opinion I have formed from the results which have as yet come under my observation. I must not be understood to imply that these agents cannot do harm; I intend to convey no such meaning. I wish only to state, that at present my experience has impressed me with a conviction that ether and chloroform are possessed of many curative properties, and, when properly diluted, may be given in large doses without aggravating disease.

May I now, without appearing to be impertinent, presume to offer a few remarks on the very interesting case which you have published for the information of the profession. I am tempted to do so, lest any one might be led to imagine that the statements I made were either overcharged or unfounded. Those who know me, I may perhaps think, will not imagine there is any necessity I should trouble myself on such a matter; but too many persons are apt to jump at conclusions upon isolated reports. Such might conjecture your experiment was a contradiction to the results I had obtained, and hence neglect that which a little consideration would convince them was worthy at least of being tried. The habit of thus hastily deciding is unfortunately only too general. A medicine, if newly introduced to notice, is often cast aside as useless, because, in the first trial made of its efficacy, it does not act "like magic." I do not conceive ether or chloroform are endued with any charmed powers. No doubt they may occasionally disappoint us, but they have done so more seldom than any other medicine I am in the habit of employing. This is the utmost I can advance in their favour, and I do not pretend for an instant they are either infallibles or specifics.

Applicable to gripes they certainly are; but "gripes," though a little word, may be made to bear a very large signification. I use it here only as representative of acute abdominal pain, and to this sense, therefore, it will be understood to be limited. Where intestinal derangement produces agony, ether or chloroform will allay the suffering for a period, but the pain may spring from causes over which neither can exert any influence. A proof of this is given in your case. In the first dose you gave two ounces of sulphuric ether, and the same quantity of the tincture of opium; after which the horse was quiet for two hours. The colicky pains then returning, six ounces of sulphuric ether, and four ounces of the tincture were administered, which failed in affording relief. Four hours subsequently to this four ounces of ether and two of laudanum were exhibited, and the horse an hour afterwards experienced a remission of his pain, and continued tolerably quiet until nine hours had expired. Without improvement the animal then remained four hours, when an ounce by weight of chloroform was tried. No result was observed save an indication that the fluid had created a burning sensation in the mouth. Twenty-one hours then passed over, when calomel and opium were resorted to; and after five balls, one given every fourth hour, containing each one drachm of calomel and ten grains of opium, had been administered, the danger subsided.

To suit my present object, I take no notice of the aloes, bleeding, oil, and tobacco fumes, though I am far from disposed to assert these may not have been operative. It is not with these, however, I have now to deal, my purpose being, if possible, to point out that the other agents were in a measure beneficial. The first dose of ether procured ease for two hours, and the last for nine hours; while the more potent drink obtained no relief. We cannot account for such eccentricities, nor will I make a pretence of arguing upon them. Every day in practice we meet with circumstances which are not to be explained. The chloroform did no good, and appeared to have no decided effect in the direction which was desired.

The ether and chloroform failed to cure, and in this circumstance many will see cause to condemn them; but I must entreat these gentlemen to pause. The aloes did not purge, though given in solution and in quantity which doubled the ordinary dose; and the inference, if equally applied, would teach us that our boasted purgative is without its far-famed property; for while the antispasmodics had some influence, the aloes literally had none.

Some advantage we may conjecture was gained by the relief which followed the administration of the drenches; and we may infer that even though two of the drinks induced no obvious ame-

loration in the symptoms, they, nevertheless, may have acted as a check on the disease, which, without them, might have been far worse. But as to the mode of exhibiting the medicines, I dilute the ether always with *cold* water, because, as is known, ether is extremely volatile, and boils at 98°. On account of its volatility I repeat the doses rapidly, often giving a second when twenty minutes have elapsed, and never delaying longer than an hour, although the improvement may be marked. If at the end of an hour the horse shews any, even the slightest, symptom of colic, I at once resort to the drenching-horn; and the second or third dose generally puts an end to that which the first sometimes only mitigates. When intervals of two, four, and thirteen hours take place, I cannot regard the treatment as continuous, so far as the ether or chloroform may be concerned, but must look upon each successive drink as a distinct beginning and independent measure. Four separate trials, in my view, were made, and some of them were decidedly beneficial. Had they been followed up, probably the result might have been more satisfactory, although I cannot assert such would have been the case: for your description of the symptoms, the full pulse and light yellow dung-balls, denote the liver to have been the seat of the affection. Could there have been spasm of the duct, or of its orifice?—or could a gall-stone, from which the horse is not exempt, have been passing through the tubes?

To these questions I, of course, can give no reply; but the disease was evidently severe, and even at the commencement assumed an alarming aspect. When a horse rolls and even kicks his heels into the air, the violence is less inauspicious than when the animal, with a pulse above the natural standard, the moment he is free, begins not simply tumbling about, but walking round his box, and, with a countenance expressive of sharp pain, keeps looking back at his belly. Here there is not colic, but, as you justly state, “colicky pains.” There are periods of aggravation, but there are no moments of tranquillity. Yet for three days the horse continued to suffer, and, although the medicines given failed to cure, nevertheless it is hard to imagine they did not arrest a disorder that began with a symptom so opposed to a favourable diagnosis. Even then, in this instance, some good may have been done, and there is no reason to conjecture any evil was induced. The certainty of this last conclusion being warranted, makes me the more confirmed in the opinions I have published; and I therefore the more urgently would direct the attention of my professional brethren to the action of these agents.

I thank you sincerely for the candid manner in which you have tried the value of my assertions, and rejoice that I have gained your corroboration as to the safety of those doses which I know

more than one gentleman was disposed to look upon as excessive. Ether, I am assured, requires to be administered in far larger quantities than it has generally been given; but, as I said in my previous communication, it is my custom to combine it with such drugs as I conceive are indicated by the symptoms. No one more earnestly than myself can object to the medicine being thought to be singly able to combat all forms of abdominal disease; but there is not an affection of this nature in which I do not believe it may be employed as a valuable adjunct.

I am sure we do more good by reporting and considering our unsuccessful cases than by making known those in which we succeed. For my own part, I am not ashamed to acknowledge I have learned most from my failures. An unfortunate termination prepares the feelings to receive instruction, and the lessons then gained are certain to be impressed upon the memory. The very lucky are seldom very wise; but misfortune has been said to be the parent of poetry, and he who feels necessity generally has an impulse given to his invention. It is a pity so many are timid about seeking that advice which candour would invite; for it can reflect no disgrace if the ways of Nature are occasionally too intricate for our discernment. It is with life we have to deal, and with death we have to combat; and, therefore, we cannot expect in every instance to triumph.

I have lately had a case which I am not aware is, in the rapidity of its termination and the peculiarity of its symptoms, known to be of common occurrence. I was called about ten o'clock at night to see a horse in a stable about five hundred yards from the spot where I reside. The animal had that day been sent to run in an omnibus; but, some signs of uneasiness having been remarked, it was not put to work. The symptoms not abating, my attendance was requested.

When I reached the place, I found the horse uneasy. There were indications of pain, but nothing of an acute character. The membranes were pallid—the pulse not to be counted at the jaw—and the extremities of even temperature. The coat looked rough—the eye dull—and the horse was restless. There was a little dung in the rectum, which was slightly coated with mucus, and the abdomen was a little swollen. The animal was evidently ill, and the mark of a blister under the jaw shewed it had recently been subjected to treatment. From what I saw, I concluded the horse had been prepared for work before the system was sufficiently recovered to endure exertion. I imagined the digestion was deranged, and, corroborative of the opinion, when back-raking the animal, I could distinctly feel a soft dull mass under my hand. I informed the proprietor that the intestines were impacted, but also

told him I saw no immediate danger. If the bowels could be moved, the result would be favourable; but while saying this, I stated that it was impossible to speak confidently, as sometimes medicines failed to operate, and occasionally, when they acted, superpurgation and inflammation set in. There were, therefore, two chances against and one for the issue; but in that one I was inclined to trust, though the condition of the animal made the prospect a little dubious.

When I stated this, my hopes were greater than I confessed; but experience has taught me that a proprietor bears misfortune better when his expectations are not too warmly excited; and I dislike the system of speaking confidently when we cannot look into futurity, and the state of our knowledge does not permit us to interpret accurately every symptom. In abdominal disease the veterinary surgeon is always more or less in the dark, and it is folly to boast of comprehending all about that of which we too often are able to make out but very little. Therefore I spoke guardedly, and concluded by acknowledging that there very probably was present something of which I was ignorant; yet, from all I could discover, there seemed to be no reason for alarm.

The manger and rack were ordered to be cleared, and the bed raked back, so that, if disposed, the horse might not eat it. A drachm of calomel was shaken upon the tongue, and a drink consisting of seven drachms of solution of aloes, two ounces of rectified spirits, and two drachms of the carbonate of ammonia, was administered. I took the precaution of rubbing a little aloetic mass upon the teeth, plastering it about the gums, with the intention of disgusting the horse with food, and making certain that he would not eat, even should he obtain a chance of doing so.

The next morning, before I entered the stable, I met the coachman, who slept on the premises, and who had been told to call me up if any thing attracted his attention. His report was, that the horse had been quiet during the night, and was evidently better. The stableman, however, informed me the animal had slipped its halter in the night, but, as the teeth were not free from the aloes, I rather congratulated myself upon the artifice I had adopted than cared for the accident. On inspection, the horse seemed better: the coat was more smooth, the eye brighter, the membranes were nearer to their natural colour, and the restlessness less conspicuous; altogether, there was a marked improvement: but, nevertheless, there was a little to be discerned that seemed to indicate all was not quite right, although I am certain, had I then retired, the proprietor would not have thought me premature in my conclusion. I do not think any one who was not a member of our profession would have imagined there was any necessity for fur-

ther treatment ; but I saw, or thought I saw, something that rather suggested a lingering and latent disease than declared a present disorder.

Acting upon that impression, I gave a drench composed of sulphuric ether four ounces, tincture of opium four ounces, tincture of white hellebore one ounce, tincture of capsicums half an ounce, and again abstracted a few lumps of dung from the rectum, which was moist and of its natural heat. The impactment I ascertained still remained.

In about an hour I again saw the animal, and I could not detect a vestige of that which previously I had seen too plainly.

At twelve o'clock, being near the place, I looked again into the stable ; for, having business which would keep me at home that afternoon, I wished to ascertain that all was going on rightly. I went in perfect confidence that I should find my patient to appearance well, intending to state that I should not call any more that day unless I was specially sent for. When I entered there was no one present, and the horse seemed to be all I could anticipate or desire. Much pleased, I was about to leave, when the stable-man made his appearance, and to my inquiries answered that the animal was quite well ; and to confirm his report, added, that it had eaten up its feed with the other horses, and would have eaten more. This statement, though in one direction gratifying, did not please me. My orders had been given that all food should be kept away ; for where abdominal disease is present, I place as much confidence in abstinence as in the drugs which I employ. Whether the disobedience to my directions made me disposed to surmise evil I cannot say ; but it struck me at the time that the business was not, as I had expected, concluded.

What was done, however, could not be helped ; and therefore, telling the man he had acted wrongly, and strictly enjoining him not to repeat the offence, I took my departure, leaving directions that I should be called if any alteration was observed.

As I walked home, thinking over the case, I felt uneasy because the horse had been fed. I must confess I have a dread of abdominal disorders, and am always fidgetty when there is a case of this kind under my treatment. They assume such various forms, and are so capricious in their courses, that I am never easy or confident with regard to what may ensue. In no other class of diseases do I feel our knowledge to be so deficient. We have only the symptoms, which are ever more or less mysterious, to guide us, and have no certainty, in the majority of instances, as to the organ which is affected, or as to the precise nature of the affection. We can never say what change may take place, or how suddenly the appearances may put on a serious aspect. We

must be constantly on the watch; for when the acute stage once commences, its progress is so rapid that minutes become of importance: therefore, I am sensitive of any interference with my wishes; feeling the responsibility, and knowing how limited are the powers at my command, I am always in dread of something starting up which I cannot interpret or may not be able to control.

No one came to call me, and, anticipating my forebodings were groundless, I walked out at four o'clock to assure myself that every thing was as I hoped. The very reverse proved to be the fact. The horse was pawing, and his appearance denoted pain. All the symptoms were bad, but not violently so. Had I seen an animal for the first time as I then saw this, I should not have said there was much danger; but it was the marked change which had commenced that made me fear. The animal was making occasional efforts to void its dung, and, thinking there might be something in the rectum, I introduced my hand. The intestine was empty, but to a sensible degree hot and dry. There was, however, no flinching upon pressure, and the pulse could scarcely be detected at the jaw. The heat was the only sign of inflammation I could observe; but there was the impactment, which had become less yielding, and had not moved.

I immediately gave the following drink:—sulphuric ether, six ounces; tincture of opium, four ounces; tincture of aconite, one ounce; camphor mixture, one pint. The horse having taken the drink without spilling much, I saw the proprietor, who proposed that the animal should be brought to another stable yet nearer to where I lived. To this I agreed; for I hoped that the little exercise might quicken the purgative; and it was impossible to conjecture that a walk of five hundred yards could do any injury. The day was rather damp than wet, but the animal was hooded and clothed, and gently led down to the stable alluded to. Hardly had he reached the place when a man came to say I must see the horse immediately. Without loss of time I obeyed the summons, and never did I witness such a virulent aggravation of disease in so short an interval. The breathing was quick, but laboured; both inspiration and expiration being full and hard. There was no rolling or plunging, but the countenance and the turning of the head to the side too clearly told the suffering and the seat of the disease.

I resolved to blister the abdomen, and for that purpose I employed twelve ounces of the strongest solution of ammonia with six ounces of water. A towel was saturated with the liquid, which was placed along the belly, and over this a thick-horse cloth was held. The application was retained for a quarter of an hour, during which a profuse sweat broke out over the whole body, and

some relief seemed to be afforded. The breathing became more composed, and the pulse became of a little better character, though it still remained so feeble that to think of bleeding would have been madness. When the blister was taken off, I found that in three places it had removed the hair and cuticle, but the spots where it had done so were not each larger than a crown-piece. The general surface was unaffected; and when I saw that Nature would not respond to the potent agent which had been employed, I concluded that the case must terminate fatally.

As the straining to dung continued, a tobacco enema was exhibited, and that also seemed to procure a remission of the symptoms; but still not to any decided extent, and the perspiration on the body felt cold. Nevertheless, there was some pulse; and as the time had been so short since the acute symptoms set in, I determined to give another drink, in the hope that it would excite the heart, and give me an opportunity of abstracting blood, or invigorate nature to struggle with the disease. Sulphuric ether, six ounces; tincture of capsicums, one ounce; carbonate of ammonia, two drachms; solution of chloride of lime, one ounce, was given in a pint of camphor mixture, and two pints of water. The horse resisted the drench, shaking his head, and trying to get away; but he swallowed the greater part, and when released, walked a few times round the box, then staggered, and soon fell, dying in an hour and a half from the time when the symptoms took on the acute form.

I was surprised when I beheld the sudden termination, and could not imagine to what it could be attributed. To the natural inquiry, as to the cause of so speedy a death, I was obliged to say that I could afford no answer. I was certain that the intestines were impacted and inflamed; but I could not by these account for the rapidity of the case. I made a confession of my ignorance, and with some curiosity began to make a post-mortem examination before the carcass was cold.

Having divided the linea alba, the intestines were seen to be loaded, and their weight rendered it somewhat difficult to examine them; for, not knowing what might be presented, I was anxious to make certain there was no abnormal development or structural change before the knife was employed to remove them. Nothing of the kind existed. The peritoneum was healthy, but its vessels gorged with dark fluid blood. The stomach was of an extraordinary size, and I attributed its unusual dimensions to flatus, which had been generated during the latter period of the animal's existence. When, however, I had released it from its attachments, and endeavoured to lift it from the cavity for the purpose of in-

specting it more accurately, in vain was the effort made; it could not be stirred. The attachments were thought not to have been separated; but all were found to be free, and it was the weight alone which disabled me from lifting it. It required the assistance of another man to effect its removal, and the interior was found to be packed full of solid food: I could not have believed a horse's stomach could have contained one-half the quantity. It was such a mass as would have crammed the ample rumen of a cow.

The lining membrane of the stomach was inflamed, and so, likewise, was that of the intestines; but the inflammation was diffused, and nowhere intense. The colon was almost as loaded as the stomach, and in several places the ingesta, where the gut had contracted, were perfectly dry, while, in general, they were moist and pulaceous.

Such were the principal features brought to light by the inspection of the body, and none are of that character which can be supposed to have arisen from accidental causes. Every thing found must be allowed to have existed during life. Then here, I ask, what was the cause of death? The inflammation, though widely spread, was hardly well-established. We well know, affections of the bowels will destroy horses in a few hours; but, then, the intestines are thickened and discoloured to a degree that explains the death. In this case, however, with no thickening of the coats, and only such change of colour as denoted the beginning of disease, in an hour and a half life was dismissed. Clearly, the inflammation could not be the cause of so speedy a termination; and, rejecting that, the history obtained and the excessive quantity of ingesta found alone remain to solve the mystery.

The horse had been ill for some time previous. From that attack it was thought to have recovered, but the digestive organs had not regained their tone. The animal, to get it fit to work, was freely fed, and no doubt the groom rejoiced to see it gorge, thinking the more it ate the greater would be its strength. Rack and manger were loaded night and day, and the morbid appetite of the convalescent animal was subject to no restraint. The stomach was distended, and the intestines crammed until the parts were paralyzed, and had lost all power to appropriate or expel that which oppressed them. The horse got loose in the night, but from the teeth, judging by the sign to which I have alluded, it did not then appear to have eaten. The aloes, then, were acting as nauseants, and nothing, which at that period could have been found, was after death seen in the stomach. Probably, while free, nothing was touched, and no quantity that can be supposed possible for a horse

to consume during a single night will account for the condition of the larger intestines. These were filled, positively packed tight, with fæces. The amount was extraordinary, and, in several places, the gut was spasmodically contracted; and had, at these parts, pressed the ingesta perfectly dry, so that their contents could be strewed about like seed. Where this, however, was witnessed, no inflammation was beheld; and, therefore, the spasm may be supposed to have accompanied the last effort of life. Animals, when slaughtered, not unfrequently present this appearance of the intestines; and as no symptoms sufficiently acute testified its existence long prior to death, I am the more disposed to attribute the spasm to the death struggle. The large intestines were one mass of impactment, and not merely clogged at certain places. The continuance of such a state of parts would induce consequences that in their turn would be destructive; but, of themselves, the intestines merely being oppressed, to however great a degree that oppression might extend, does not account for the fatal termination of the case.

The stomach alone can afford the explanation I am seeking. It must have held what ought to have composed the food of three days, at least; and it must be remembered that, for the last twenty-four hours of its life, there is reason to suppose the horse fed but once. Knowing that Nature, having given the horse a diminutive stomach, has proportionably quickened its digestive function, the accumulated contents of that organ can only be accounted for by presuming it had become paralyzed, or so far lost its normal power as to be unable to propel the mass which was found within it. Against this notion of paralysis the continuance of the appetite may, at first sight, appear to be opposed; but, on reflection, will be found rather to support than contradict the supposition. A craving for more than can be appropriated is an ordinary symptom of gastric disease, and one which is as frequently observed in animals as in man, though not so strongly dwelt upon. The appetite, therefore, corroborates the idea, while the degree of distention may be said to prove its correctness. Had the power of contraction been retained, rupture must have ensued. In no case of ruptured stomach that I have witnessed has the amount of ingesta been comparable to the quantity which I found present in this instance; therefore I conclude, that, from the weakness of convalescence, the digestive organs were debilitated in the first instance; and that debility by mistaken treatment was so much increased, that paralysis of the intestines and stomach was established when I first saw the horse.

Under the simple measures at first pursued something like tone

was restored, and Nature was evidently struggling to relieve the system. This probably might have been accomplished; but an erroneous wish to benefit the animal induced the stable-man to feed it, and from that time the symptoms became aggravated. The strength could not endure the additional burthen cast upon the enfeebled organ, and the motion, though only a walk of five hundred yards, induced such excitement that the life was lost. Collapse, which the most powerful medicines could not combat, was provoked; and death ensued rather from oppression than from actual disease. Inflammation had commenced, and under that there is much reason to believe, considering the weak condition of the horse, the animal would ultimately have perished; but there is no reason to imagine it was the cause of death, which I attribute to a sudden sinking of vital power consequent upon sympathy of the more important functions with the oppression of the digestive organs.

The speedy termination, and the peculiarity of the symptoms altogether, render this case extraordinary. I am not aware that any of a like nature have been reported; but I cannot believe that they are so rare as never to have been observed. To the eccentricities of gastric disorders veterinarians have paid too little attention. We speak of indigestion, stomach staggers, and gastritis, but to the multifarious possibilities of indigestion we give no notice. The treatment, even for accidental varieties of gastric derangement, is not laid down, and no discussion has been held concerning the measures that ought to be pursued. I know not in what degree I might have altered my treatment, had I been aware of the condition of the stomach during life; but, at all events, I am assured that where impactment of the intestines can be by examination per rectum ascertained, rest and total abstinence from solids should be enjoined; since, when one portion of the digestive track can be dormant, there is cause to more than suspect other parts are in a similar condition. By keeping away food the stomach has an opportunity not only of getting rid of an oppressive load, but also of recovering the tone which distention had destroyed.

One symptom, from the observation I have given to these cases—gastric disorders having engrossed much of my attention—I have found characteristic of the overloaded condition of the stomach. Considering that the horse is unable to relieve itself by vomition, it is of the utmost importance we should have something like a clue to a state of repletion, which abstinence only can be employed to remedy. The pulse, when colic is combined with indigestion, is always, in my opinion, oppressed; often feeble, and sometimes entirely lost: it is never full, sharp, or hard. The pain accompanying gastric disease is seldom acute, and rarely presents those periods of

perfect ease which ileus always exhibits. Perhaps there are but few cases of flatulent colic in which the stomach is not involved; since we rarely witness this disease in horses that are not either coarse feeders or feeble from age and work.

On this subject I should like to offer some further observations, but I have already trespassed too much upon your space; yet I shall not regret having done so, if I may be the means of eliciting information, or calling forth discussion, upon a subject which has been too little noticed in veterinary science.

I have the honour, &c.

16, Spring-street, Westbourne-terrace.

THE IMPROVED CASTRATION HOPPLES.

To the Editor of "The Veterinarian."

Dear Sir,—IN the last Number of THE VETERINARIAN I gave a description of some hobbles for the castration of colts, which appears, from a communication I have since received, is not sufficiently explicit for them to be generally understood. The "crottel," as I have termed it, is a piece of iron secured to the collar strap: at the upper part of the crottel there is a deep notch or groove, about one inch square, into which the two rings of the ropes are dropped, and there secured by a thumb-screw. Immediately beneath this notch is a square space in the crottel, one inch and a quarter in the clear, where the collar strap is firmly secured, and which square is of sufficient size to admit the passage of the spare end of the strap, on the principle of a loop, after being buckled round the neck. The crottel is simply a great improvement on the common knot, which liberates the animal immediately, by withdrawing the screw. I was incorrect in stating that the ropes pass through their respective rings after being brought between the hind legs; they are simply passed under the collar in the usual way. I believe the term crottel is used in the smith trade generally for any iron fastening, and, being at a loss for a term, I thought it the most appropriate. There are such a number of directions required, and such a variety of ways of securing the animal when down, and the difficulties of description of these matters is so great, that I conceive it to be almost impossible to explain these things

minutely by writing. Actual observation alone will enable people to understand them. Practical men will, I think, understand them fully.

Believe me to be, dear Sir,
Your's, faithfully,
M. GLOAG.

Hounslow, 21st October, 1848.

* * * The Editor—fearing that ambiguity may still exist concerning an apparatus, which, though not complicated in itself, is of a nature that, taking its construction and application together, seems to defy due explanation from description alone—is about to have a set of the hobbles in question made, which, when complete, shall lie open to the inspection of any gentleman who will honour him with a call.

REFUSAL OF PROFESSOR SEWELL TO ADMIT A REPORTER FOR THE PRESS TO BE PRESENT AT HIS INTRODUCTORY LECTURE.

To the Editor of "The Veterinarian."

Sir,—I WENT to the Royal Veterinary College, Saint Pancras, to-day, and was there by half-past eleven o'clock. As I entered the gate, I met Professor Spooner, who was coming through a number of persons standing there, and looked very hard at me as I went to the lecture room, where I found no person yet. After I had been there a few minutes, a tall gentleman came in and asked me if I belonged to the College. I told him I was a member of the press, and attended for the daily papers. He asked me if I had the permission of Professor Sewell to attend the Lecture. I told him I did not consider it necessary. He said he considered it necessary before I could remain, as he knew all about it. Thinking it advisable to see Mr. Sewell, and make the same representation to him, I accompanied him to Mr. Sewell, and did so. He said he had engaged a reporter, who would publish a report of the lecture, and he did not, therefore, want it forestalled: I could not, consequently, be present. I told him that he was the first Professor who had ever refused me, as a representative of the press, to be present at a lecture, and that I considered I was treated very ungentlemanly: upon which Mr. Sewell said he would consult his Colleague, and took me to another part of the College, and ushered me into a room, where he left me and went into the passage, where

I saw him in conversation with Mr. Spooner. Presently he returned, and said, "We decline admitting you—you cannot be present;" and, addressing the person who first spoke to me, said, "He can't go in, he must withdraw;" and I was then required to withdraw, the person whom Mr. Sewell addressed walking with me to the gate.

I am, therefore, prevented forwarding you any report.

Your's, respectfully,

C. TENTEN.

4, Scarsdale-terrace, Kensington,
Monday afternoon.

Foreign Extracts.

EFFECTS OF CHLOROFORM ON ANIMALS.

[Such is the title of a communication read by Professor Thier-nesse to the Academy of Medicine of Belgium, at their Sitting of the 1st of April last, and from which the following are extracts:—]

THE moment surgeons, last year, commenced putting into practice the precious discovery of Mr. Jackson relative to the anæsthetic powers of inhalations of the vapour of sulphuric ether on the respiratory passages, I made a vast number of experiments on divers animals, with the view of ascertaining the action and effects of ethereal inhalations, and of ascertaining if it were possible and profitable to introduce the same into veterinary surgery.

By these experiments I hoped to have thrown light upon the leading questions concerning the influence of this chemical agent on the nervous system, the muscles, the blood, &c., as well as to have demonstrated its innocuity in the operative medicine of domestic animals.

* * * * *

In imitation of the learned Professor of Edinburgh, most of the French surgeons prefer, now, chloroform to ether, on account of the promptitude of its action, as well as for the great facility it offers for inhalation. I shall, therefore, commence with the phenomena generally observed on animals submitted to inhalations of chloroform.

During the first inspirations of air charged with this chemical agent, animals are always calm, breathing regularly. Soon, however, they become agitated, while saliva flows from the mouth, the pupil grows dilated, the pulse accelerated, then much retarded,

so much, indeed, that it beats with less frequency and force than in health at the moment of the extinction of sensibility. This last result obtained, the muscular system becomes relaxed, and mobility, more or less, completely suspended.

These constitute the general phenomena invariably present on such occasions. But I felt desirous of knowing what was the condition of the arterial blood during chloroform inhalations, and especially at the moment when anæsthesia was produced.

These experiments consisted in rendering dogs insensible by chloroform inhalation, and then drawing blood from arteries already laid bare for the purpose. The blood which immediately followed the puncture of the artery invariably proved of a dark venous or brownish hue, but as invariably speedily turned florid red on the animal being suffered to respire the common air again.

After having convinced myself, by these experiments, of the invariability of the blood to grow dark-coloured under the influence of chloroform, the same as under etherization, I became anxious to ascertain whether such a result was to be attributed to a specific action of the anæsthetic agent on the lungs, or simply to the rarefaction of the respired air caused by the admixture with it of chloroform gas. For this purpose, I induced insensibility by injecting chloroform into the veins, as completely as though I had administered its vapours by inhalation, and the moment insensibility was produced drew blood as before from an artery previously laid bare. Now, however, the stream of blood exhibited a florid red hue.

This last experiment proved to me that it was not by any action on the globules of the blood that either chloroform or ether caused a change in their colour; but by occupying the place of a sufficiency of common air, and thus more or less completely interfering with sanguification in the lungs.

I do not, however, infer from this that suspension of sensibility and mobility from ethereal or chloroform inhalations is the result of defective sanguification or asphyxia, or that the latter necessarily accompanies anæsthesia. On the contrary, I have reason for believing that this last principally depends upon the special soporific action of the ether or chloroform on the nervous system, without any previous change of the blood, with which it mingles only to be conducted over every part of the body.

After having by these experiments endeavoured to solve the still controverted question of the effects of chloroform inhaled into the respiratory passages, I naturally felt a desire to make application of the same to veterinary surgery. I shall now communicate the results of my experiments on this head.

The experiments detailed offer nothing new. They were made

on horses and dogs, and from them (limited in number) the Professor has come to the following conclusions:—

I admit that we may, in veterinary surgery, derive advantages from the anæsthetic properties of chloroform, and particularly when we have to perform painful operations on the smaller animals. And, as for the larger animals, they may equally be placed under the anæsthetic power of this new agent; but then the operation becomes costly. And on this account, perhaps, veterinarians would give the preference to ether, whose price is less, and whose effects are no less certain.

Both agents take effect equally, whether injected into the veins or inhaled into the lungs; though such effect we neither produced nor dissipated with the same promptitude.

What I have noted, in some comparative experiments I have made with the two, is—

Supposing a sufficient dose of both to be administered, the anæsthetic effects of chloroform become manifested quicker than those of ether, and likewise become dissipated more quickly, providing the insensibility be not complete; but, on the contrary, more slowly, whenever chloroform inhalation has been persisted in some seconds after the patient has manifested insensibility to pinches and prickings. And in this last case the animal is in danger of dying.

Chloroform, preferable as it is to ether, from its acting more promptly, possessing a more agreeable odour, and being efficaciously respirable without the necessity of any apparatus, presents, however, greater danger than ether, and consequently demands more sustained attention on the part of the medical practitioner.

Bulletin de l'Academie Royale de Médecine de Belgique.

VETERINARY EDUCATION AND PRACTICE IN FRANCE.

AT a moment when, at the instigation of M. the Minister of Agriculture, a commission is charged to examine into the state of legislation as it affects the teaching and practising of veterinary medicine in France, with the view of proposing such modifications as may seem proper, it appears to us important that the public should have laid before them the objects of the *projet de loi* touching the practice of veterinary medicine which had been prepared by the old administration, but which had had, from year to year, its presentation and discussion before the legislative chambers deferred.

In the present state of affairs, no general or special law, no order having the force of a law, reserves to the pupils of the veterinary schools the exclusive practice of animal medicine.

It is true, a decree of council, sanctioned by the king, dated 11th August, 1765, "authorises such pupils of the veterinary schools as shall have for *four* consecutive years been engaged in the study of their profession, to practise for the time to come their art, by virtue of royal privileges conferred upon veterinary science;" but such "privileges" have since, by decrees of the Constituent Assembly, been abolished.

So that we are reduced to the humiliating confession—one the laws bear us out in—that, at the present day, the right of practising veterinary medicine, without diploma or certificate of capacity, remains not only unforbidden in France by any penal statute, but is not even by law accounted actionable.

The penal law of France takes no notice of any act of usurpation of title conferred by diploma from veterinary schools. The decree of 1813, and the royal ordonnance of 1825, have well defined the conditions on which certificates or diplomas were to be granted, conferring the degrees of *Veterinarian*, *Veterinary Mareschal*, and *Veterinary Surgeon*; but the right accruing to those entitled to such distinctions appears so ill established in courts of justice, that it has been decided that such titles could be assumed by anybody, with or without diploma, practising animal medicine.

So that, by the existing (French) law, while any fresh comer may practise animal medicine without any diploma, he may at the same time, if he chooses, assume a title which cannot be conferred upon any pupil of a veterinary college under four years of regular study, followed by examination.

Such a state of things is evidently as unjust towards veterinarians as it is prejudicial to the public interest.

And these are not the only disadvantages arising out of such legislation.

At the period of the issuing of the decree of 1813, there were not above twelve hundred veterinarians in France; and at that time, the service of the army requiring a large number, agriculturists were left so in need, in many localities, of medical aid for their sick cattle, that they were forced to call in empirics. This was for them a lamentable alternative. Government saw this, and, in order to assist them, modified the laws relating thereto.

Now, it was enacted, that every veterinarian be authorised to take pupils on conditions that shall be agreed upon between the

parties; and, after an apprenticeship of two years, that he be empowered to give a certificate of *expert mareschal*, subject to the counter-signature of the prefect, or sub-prefect, or mayor, &c.: there is no order that the qualification of the veterinarian shall be tested, or is there any prescribed limit set to this authority. It is merely ordered that he shall keep a forge.

As might readily have been foreseen, a privilege evidently so extravagant was not long before it became the source of scandalous abuses. Neither checked nor arrested by any *surveillance*, numbers of veterinarians, with and even without forges, made it an affair of speculation to grant certificates of *expert mareschal*, granting them with the more facility and less observance of the *term of apprenticeship*, according as those who asked for them *were able to pay for them*. And in this manner has a great number of ignorant empirics succeeded to a certain point in establishing their position, and more effectually imposing upon the farmers.

In fact, with an immense majority of farmers, the qualification of "*expert mareschal*," which, before the creation of veterinary schools served to designate men who undertook the medical treatment of animals, has to the present day the same signification. So true is this, that in most of the country places, and in some towns, people hardly know what a *veterinarian* means; or know him who bears such a title in no other respect than that of *expert mareschal*. Indeed, under no other appellation are veterinarians found noticed in an act of parliament thirty years posterior in date to the foundation of veterinary colleges.

* * * * *

Few words will suffice to demonstrate the evil of such a state of things.

Animal medicine, it will be imagined, in order to be practised to advantage, demands of those professing it an amount of knowledge not to be obtained but through long and arduous study. Therefore it follows that, practised by men possessing no such special knowledge, and even for the most part unpossessed of any science at all, not only is it deprived of any real advantage to farmers, but cannot have other results than the compromise of the preservation and life of their cattle. In fact, experience every day shews that it is better to suffer a disease to take its own course, than to combat it by treatment so irrational, violent, and incendiary, as the generality of quacks employ.

Recueil de Médecine Vétérinaire, April 1848.

REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.—HOR.

THE POCKET AND THE STUD: *or Practical Hints on the Management of the Stable.* By HARRY HIEOVER. Small 8vo, pp. 215. London: Longman & Co. 1848.

HOWEVER far apart the laws of physics may set “the Pocket” from “the Stud,” the law of cause and effect will demonstrate them to be, incongruous as their natures may appear, successive links of one and the same chain. Without the pocket there could be no stud; while but for the stud the pocket might oftentimes prove full when it is found empty. The object of the work we have in hand is to prevent such a disastrous state of affairs. The subject is a *ticklish* one—one nobody ought to undertake—albeit he be an “undertaker,” as our author represents himself to be*, unless through conviction of “practical experience” he felt himself thoroughly “at home” upon it. No person keeps a horse but fancies he knows “all about a horse,” and, *pari ratione*, all about his stable as well. Every groom, every stable-boy, with more pretension, aspires to the same kind of knowledge. A waggish astute old riding-master, an intimate friend of ours, was wont to say, whenever any young sprig of his acquaintance had become, for the first time in his life, possessed of a horse, that he would be sure to be “down his horse’s throat before his mouth was open.” Now, if the equestrian tyro took such a summary mode of obtaining an *insight* into his new acquisition, there is every reason to suppose he would manifest like alacrity, and contrive to be “in the stable before the door was open,” that he might thereby gain equally prompt and practical notions about stable management.

Of all the various hobbies men ride in pursuit of pleasure, few are apt to turn out more costly than that living hobby yclept “a horse.” Horses are expensive articles of purchase. Horses “eat at night” as well as by day, while their keepers sleep. Horses are continually running or falling into scrapes. They fall down; they fall lame; they fall sick, and, now and then,

* See the “Introduction,” page 1.

they fall dead. All which “falls” or failures render horseflesh—and particularly *unseasoned* horseflesh—extremely precarious property. And, moreover, it is property we cannot *insure*; at least, we know of no establishment which has felt “assurance” sufficient to launch into so novel and “doubly hazardous” an undertaking. Momentous considerations such as these will render a practical work like “The Pocket and the Stud” of incalculable value to the owner of a stud, since in it he will find “suggestions as to the best way of buying a horse;” all he desires to know about “stable management,” and all he ought to know about “different kinds of food;” added to which are useful hints on “stable economy;” on “the different value of different horses;” together with the “different modes (in different countries) of keeping horses;” also on “the kind of horse best suited for different carriages,” &c &c.

Thus much for *our* “prologue.” And now we will give our facetious author’s—Harry Hieover’s—prologue to his “Introduction,” superscribed as it is with the lugubrious couplet,

“Prologue precedes the piece, in mournful verse,
As undertakers walk before the hearse.”

“In these words commences the prologue to a play: why should they not serve for an introduction to this volume,—not being so inapt to the subject as they may at first appear? First, then, in commencing a preface, I am an undertaker; and in beginning the work, I am an undertaker still. There is, however, this difference between us; I endeavour to make my work go on as cheerfully as I possibly can—my brother undertaker makes his proceed as mournfully as possible. He feels it his duty to walk before his work; whereas I see no advantage in my walking before mine, though I shall feel much flattered if others will only be kind enough to walk after it. Not that inducing them to walk is by any means its purport;—quite the contrary: its aim is to tell them how to *ride* with as little waste of money as possible.”

This smacks somewhat of the immortal bard of Avon:—

Hamlet. Whose grave’s this, sirrah?

Clown. Mine, sir!

Hamlet. I think it be thine, indeed; for thou liest in’t.

Clown. You lie out on’t, sir; and therefore it is not your’s: for my part, I do not lie in’t, yet it is mine.

Hamlet. Thou dost lie in’t, to be in’t, and say it is thine: ’tis for the dead, not for the quick; therefore thou liest.

Clown. 'Tis a quick lie, sir ; 'twill away again, from me to you.

Hamlet. What man dost thou dig it for ?

Clown. For no man, sir.

Hamlet. What woman, then ?

Clown. For none neither.

Hamlet. Who is to be buried in't ?

Clown. One that was a woman, sir ; but, rest her soul, she's dead.

CHAP. I sets forth, as its bill of fare, "Suggestions as to the best way of buying a Horse ;—Advice of a judicious Friend indispensable ;—Never buy for yourself ;—How to choose an Adviser ;—What Kind of Horse to choose ;—Different Sorts of Dealers, Breeders, &c."

There are few more unwelcome commissions—few commissions which those who undertake them are more likely to break down at, either by failure of execution or failure of giving satisfaction, than those of purchasing horses for persons not themselves horse-men. Persons of this description view horses in the same light as any articles of merchandize made with hands ; they cannot understand why one or two hundred pounds should not for a mathematical certainty command a good horse, much less can they understand how it happens that a horse that is good in one man's possession may be good for nothing in another's. Such words as *management* and *condition* find no place in their vocabulary. If the new purchase should not turn out what his purchaser expected or assured to himself it would, in his heart he blames his agent, probably friend, who has, perhaps at much expense of pains and time, procured it for him, even supposing good manners should prevent his insinuating such disappointment to his friend's face. The consequence is, dissatisfaction on one side, displeasure, disgust perhaps, on the other ; ending too often in loss or diminution of confidence or friendship, or of both. Let us see what Harry Hieover's observation has taught him on this head.

"The office of purchasing *any* thing for friends is one that a sensible man would certainly rather avoid than seek ; for should he in point of quality or price, by superior tact or judgment, save a friend thirty, forty, or fifty per cent. in the purchase, he would first find it difficult to persuade that friend that he had done so, or that the friend could not have done as well for himself. Then,

should the horse or article purchased turn out ever so well, he will barely get thanks for what he did; but should he or it not realise every expectation formed, he will not only get constant and sundry direct and indirect hints on the subject, but, worse than all, will probably find that he will be expected to turn salesman. Should he get the purchase off without loss, all that will be thought is, that it was no more than his *absolute duty* to do so. If any loss accrues, it will probably be delicately insinuated, that, had the friend purchased for himself, this would not have happened; though it may be perfectly well known that he never made a purchase in his life by which he did not lose. But then, of course, that all arose from *ill-luck*, not from want of judgment—for this is a want to which very few are subject, when judging themselves; though their thinking so is the best possible proof that they do labour under such deficiency.

“Notwithstanding these stumbling-blocks in the way of obliging another, no man of good feeling or good-nature would, where his judgment was properly appreciated, refuse to purchase for a friend, if, from any circumstance, his doing so would render a service; but, then, purchasing for a friend is quite a different thing to playing jackall and starting the game for Mr. Lion to select from, or forking out the chestnuts to save Mr. Pug the risk or trouble of doing it himself. To be requested by a friend to look at a horse *he* has found, is a compliment; to be sent to find one for the friend to look at, is diametrically the reverse.”

“Never buy for yourself.” Two heads in most matters—in horse matters especially—are better than one, even though that one be on a “good judge’s” shoulders.

“I am quite satisfied that most men who *are* good judges would, if they studied their pecuniary interest only, very often do much better by letting an equally good judge buy for them, than by purchasing for themselves.”

But the person who is not a horse-man stands in a very different situation, and particularly if he should happen to stumble upon a purchase that does not suit him, which it is about ten to one that he will do. A man, himself a good judge, may indeed happen to “catch a Tartar,” or “get hold of a screw;” but then, he knows and can put in practice ways of taming the one and of remedying the other, probably. Whereas,

“The man who is not a horseman can do neither. Whatever the faults in a horse that he may purchase, they will be shewn in all their deformity; very probably be made worse. Tattersall’s, ‘to be sold for what he will fetch,’ is the only remedy. There,

some other Mr. Green gets accommodated ; the original one (notwithstanding the lesson) no doubt going to market again ; he will then probably get the significant colour changed, and he gets done Brown. This *do* possibly makes him look very Black, till he again sells, and again buys one who, on his mounting him, makes him look very Pale, and throws him. This makes him Black-and-blue : he sells him, and gets another *bargain*. Before mounting, he looks at his bruises ; he finds *they* are Green ; and, when he is mounted, the people look at *him*, and declare he is Mr. Green again."

The enormous prices horses fetch that turn out what we understand by the epithet "good"—whether good as hackneys, good as hunters, or good as harness horses—often induce people to make purchase of young, fresh, untried horses—diamonds in the rough—in hopes that by proper polish they may turn out diamonds of the first water. Hear what Harry Hieover says to this :—

" There is only one 6 on the six sides of a die ; so we must not *expect* to throw it twice running. We may, and often do ; but sometimes we may throw ten times without the 6 ; so it brings it to about the same odds. They are quite as great against a young horse turning out first-rate.

CHAP. II, comprising "Stable Management" in its various ramifications, is no less interesting to us than its predecessor. The construction of a stable, having reference to aspect, to temperature, to ventilation, to comfort, is a most important consideration connected with the health and well-being of its animal inhabitant. The appearance and condition of a horse will mainly depend on his stable : his comfort should likewise be taken into account. A horse, however, may be comfortable in a situation not altogether conducive to his health, or he may be healthy in one that is not all that could be desired for his comfort. The desideratum is to combine the two. And, to the general observer, there is no better test of the accomplishment of this double end than what is afforded by the *coat* of the stabled horse. It is, in the stable-man's eye, a veritable thermometer, and a barometer as well, and particularly about the season of "the change of coat."

" At this time, a few days will change a horse's coat from satin to cotton velvet, unless the thermometer in the stable is closely watched and each horse watched also. Lucky, indeed, is the man who, if he does not strictly attend to this himself, has got a groom who will. All the comfort—nay, luxury—of a fine coat in a

horse will be destroyed by a few days' inattention in the autumn. Let him once get his coat up at this time, you may look forward to early summer to see him with a fine one. Nature is uncommonly obstinate in this particular: if she is permitted to put a pea-jacket on a horse about the time I mention, I defy art to take it off again unless she cuts it off.

"I have heard a diversity of opinion between the good or bad effects of two different modes of keeping horses warm, some advocating very cool (I do not say absolutely cold) stables, with heavy clothing; others very warm stables, with lighter clothes; and these two opposite modes I have heard discussed by men who were quite competent judges of the matter. I should be very presumptuous, where such men disagreed, to pretend to say which was wrong; but I can have no hesitation in saying the man who took the middle course would be right. Supposing, however, it was necessary to adopt one of the two extremes, and any one complimented me so far as to ask which I should consider the *least bad*, I should say, a stable somewhat too warm and moderate clothing. I reason by analogy. We will suppose two persons to be sitting in two different rooms, the one in a room at the ordinary warmth of a comfortable dining-room—say 65 degrees—and clad in an ordinary evening dress; the other to be placed in a room ten degrees colder, but so belamb's-woolled and bepiloted as to bring the temperature of his skin to the warmth of the other. Let them both strip to their shirt and drawers, which we will consider to stand in the place of the natural coat of the horse, and go out. I consider the man throwing off his sweaters would feel the sudden exposure of his skin accustomed to such clothing more severely than the other would the change of atmosphere. Against this, I am aware it may be said, how severely we feel the cold coming out of a theatre or crowded ball-room. No doubt we do, and so would a horse coming out of a stable of the same temperature: but when I allude to stables somewhat or rather too warm, I do not mean one at 80 degrees; and when I state I prefer one rather too warm than one rather too cold, I mean it in the case of gentlemen's horses, not of a street cab horse, or even a medical gentleman's pair, or the one condemned to shiver for half an hour at some old lady's or hypochondriac gentleman's door, while the worthy Esculapius is persuading either that their case requires the most delicate care; or in a case which, in justice to our medical friends let us allow, is of quite as frequent occurrence, namely, where the fancied invalid endeavours to convince the medico of the same thing. Such animals (not the invalid or medico) must be kept cool in every way, both as to stable and clothing: so far as their outsides go, their warmth must emanate from (in stable

slang) their 'body lining;' and even then they must be brought to bear this sort of treatment by degrees; for let a medical man, in the middle of winter, purchase of a private gentleman a pair of horses which have been accustomed to different treatment, in a month, or perhaps less, he would want another pair. We should recollect that gentlemen's horses are in their stables, taking one day with another, perhaps twenty hours out of the twenty-four, and when they are exposed to the air they are at exercise or work. Consequently, the proper warmth of the air they breathe in their stables is of vital importance to them; and though I most decidedly object to their breathing a hot damp air all this time, I am quite sure, clothe him as you will, a horse will never feel comfortable, or be in condition, that breathes a cold one. How should we like (clothe us in blankets if you will) to be kept night and day with our head out of the window? A *cold* stable is in a limited sense something like this:—let me ask my friends this simple question,—Have they never on a cold night (though with plenty of bed clothes on) put their noses under them? If they have, I need say no more on the luxury of inhaling cold chilling air, or its reverse."

Along with good, sensible, analogical reasoning like this, we have practical hints and suggestions concerning the fitments and furniture of stables, such as could proceed from him alone to whom matters of the kind have come home through sheer practice and steady observation. Take, for example, such remarks as—

"The lower windows (of a stable) I have had made to slide right and left into the wall. They are less liable to be broken." And on a "moveable frame made to fit the window on the inside may be stretched the same kind of open material that is used for meat-safes: the windows can then be left open, and those positive pests to a stable in summer, the flies, are thus excluded."

There are several objections to long stall-posts; and most of these apply likewise to the ornamental(?) balls which are, as a sort of substitute for long, placed upon short posts.

The horse, after being turned round, in returning to his manger "is forced to tuck his head and neck round like a turkey poult prepared by the poulterer. This takes him some little time to do; and there are such things as grooms to be found who, instead of permitting him to do it at his leisure, have a habit of accelerating his motions by a flick with the duster: round he forces himself, making the standing creak again, and looking—and, indeed, being—frightened out of his wits, from supposing he has done something wrong. But, more than this, some timid horses, if told to 'go round!'

sharply, forgetting the stall-posts, bang their heads against it, and many an eye has suffered in such a case; master finding his favourite Quornite the next morning with one shut. Of course, the horse 'did it during the night, in the dark,' where perhaps that eye will for the future remain."

"Take them for all in all, as to look, comfort to the horse, economy as to forage and durability, I should say a small iron corner rack on the near side is best."

"Iron mangers possess several advantages over wooden ones; horses cannot contract the habit of gnawing the bottoms of them, nor are they so tempted to lay hold of them in any part. Some get into the habit of licking the manger: this is all but a sure precursor to crib-biting, and should be put a stop to immediately. Let the *stationary* manger be well smeared over with train oil, and have a wooden lining made to fit in: this should only remain while the horse eats his corn. If this is attended to so soon as the habit is first taken to, the horse will oftentimes leave it off."

Of the many contrivances and inventions we have had to check, prevent, or eradicate that vexatious, vicious, and injurious habit, crib-biting, perhaps this is one of the most effectual. To us it is novel, and we shall not lose sight of it.

"If any one who may read this work holds economy worth consideration, I would suggest to him that ordering his head collars to be made with, as it is termed, the flesh-side outwards, causes them to wear nearly double the time of others."

"There is a fastening made to affix to the manger, for which, I believe, a patent was taken out, but I forget in whose name: this is as secure as the common ring, so far as relates to a horse pulling at it in any ordinary manner. But should he get a leg over the collar-shank, and consequently be in danger of throwing himself down, he must, of course, force the shank strongly downwards: in such a case a spring gives way, and he gets free."

"The whole secret of a horse hanging back is, that where the stall is much on the decline, from the manger to the stall-post, standing on an inclined plane causes his loins and hind parts to ache intolerably: he hangs back in order, if possible, to get his hind legs beyond the gutter, thus diminishing by many degrees his standing up hill. In good and well laid stables horses are not found to acquire this habit; so the cause of it speaks for itself, and ought to be immediately remedied, which any common brick-layer may do, if he pleases, in half a day."

We repeat, practical remarks like these could be made by no one save a man who had "walked" the stables as a diligent

medical student "walks the hospital." Harry Hieover has evidently both looked and judged for himself, and "no mistake."

We could pick out several more passages from this interesting portion of the work, did our limits or our conscience permit us: we already, however, begin to blush for our pilferings, and feel we ought and must pass rapidly onward, from the middle, whereabouts we find ourselves arrived, to the page wherein stand out by themselves, in bold relief from the text, the words

"THE END."

We must, however, ere we reach that bourne, have permission granted us to make an extract or two, shewing in what estimation our craft is held by a man who is the acknowledged Nimrod of his day.

"Whenever it (bad luck) comes in the shape of a horse falling lame or amiss, *go yourself* with him—or, if in a lady's case, send some friend with him—to the best class of veterinary surgeons: it will be the least expense in the end."

One more "illustrative anecdote," and we will wind up.

"I had, within the last month, occasion to put a horse at livery for a few days, where the owner of the yard has about twenty horses working in street cabs. Observing one of them in a coach-house, and guessing illness to have caused him, or rather her, to be placed there, in accordance with my usual habit I went to see what was the matter. To enlighten me on the subject, an ostler came and informed me the mare was 'mortal bad': this I had sense enough to see, without his assurance of the fact; but, as the acme of professional information, he farther told me she was 'bad of her inside.' Now, as the unfortunate beast was blowing away like a steam boiler, my veterinary knowledge went far enough to draw this inference also.

"'Why, man,' said I, 'the mare has inflammation of the lungs; I don't see that any thing proper has been done to relieve her. Does any veterinarian attend her?—I suppose not.'"

"'Oh, yes,' said my informant, 'a young man attends her that master has a great opinion of.' Well he deserves it, thought I; observing, 'I suppose he is going to do something for her immediately?' 'No,' says the ostler, 'he has given her some balls, but he says she is sure to die; so he won't do nothing else.' 'He is quite right,' said I, 'as to her dying, for die she most certainly will under her present treatment.' So ended our conversation.

“A friend of mine, one of our most eminent and, I believe, most experienced army veterinary surgeons, called on me next morning, and, on going to the stables, I shewed him the mare, as a living proof of the ignorance of common farriers. Nothing had been done; he was told the same story I was, and also of the prediction of the mare’s dying. ‘Die be——,’ said my friend, ‘so she will, and that very soon, if nothing is done for her; but, if I had her under my care, I would insure her life for half a sovereign.’ Notwithstanding the ostler told his master this, instead of sending for some man of sense, he took the word of the young man who stood so high in his estimation. The consequence may be anticipated:—a useful animal was lost through improper and want of proper treatment.”

The unreasonably lengthy contributions to our own pages we have been tempted to lay “The Pocket and the Stud” under, will sufficiently attest the high opinion we have in our own mind formed of the work, and the value we set upon it as “an instructor” to all persons “green” in the stable, or that have been done “brown” in the horse mart. And particularly can we take upon ourselves to recommend it to the perusal of students of our own art, who may, *faute de pratique*, find themselves in need of that information which will certainly be expected and required of them, the moment they, in their private practice, are called on to attend studs. Stud grooms—all real grooms—are knowing, some indeed intelligent, in their line; and such fail not, unerringly, to “find out” any veterinarian in attendance in their stables who may not possess the same *stabularian* knowledge; and having found him, as they say, so “ignorant,” rarely give him much credit for possessing professional knowledge. And not only is such a feeling uppermost in the breast of the groom, but it inhabits that of the master as well. And, moreover, not merely is this knowledge of stable concerns requisite to guard the reputation of the veterinary surgeon, but without it will he find himself unfitted in many respects to prescribe the regimenal and dietetic management his sick patient requires, or give any sound advice about the treatment of horses in health. Let all veterinary students therefore, we say, feeling the absence of such requisite knowledge, make their bow and appeal forthwith to Harry Hieover.

THE VETERINARIAN, NOVEMBER 1, 1848.

Ne quid falsi dicere audeat, ne quid veri non audeat.—CICERO.

THE ejection of our Reporter from the Royal Veterinary College by Professor Sewell—as appears by his (Mr. Tenten's) letter in another part of our Number—seems to us a most strange and unwarrantable act—an act unprecedented in the annals of public lecturing; an act, we will venture to affirm, no lecturer at any medical school in the United Kingdom, save Professor Sewell, would for a moment have meditated, much less have put into execution. Such a proceeding is contrary to all usage, to all good manners, to all feeling, to all right, and, we may add, to all good policy. An “Introductory Lecture” is accounted everywhere, and by every body, to be an *open* lecture;—a lecture to which the public are gratuitously admitted—nay, invited, to give them an opportunity of framing, in their own minds, some sort of estimate of the lecturer's abilities, as well as of the nature and value of his lectures. It is, in a word, a kind of bill of fare and tasting dish of what is meant in the course to be served, and according as it proves pleasing and palatable is it likely to attract a greater number of subscribers to the regular or paid-for lectures: this being a lecture nobody is expected or asked to pay for; but, on the contrary, one, we repeat, in which the public at large are invited to take common property. Under such impressions as these it was that, on the 23d of October last, we commissioned Mr. Tenten to take down the heads of Professor Sewell's “Introductory Lecture,” with the view of giving the same to the profession in our impression for the present month; conceiving, thereby, we might not only gratify our subscribers, but at the same time be serving the cause of veterinary science, as well as promoting the purpose and end of the lecturer. Wofully, however, have our good intentions been frustrated, and wofully thereby, we are afraid, will the reputation of him suffer who has, through weakness of mind, allowed himself to be instigated to the commission of an act so repugnant to all custom, in itself so ungentlemanly, so contemptible. Throughout the length and breadth of the profession will this act

of exclusion raise but one feeling, and that will tell sorely against the pusillanimous Professor. Nay! throughout the circle of the periodical press will it tell against him. The gentlemen reporting for these publications will not have their privileges broken down with impunity;—they will avenge this insult offered to one of their own body.

Professor Coleman refused to receive a fee for admission to his lectures from any person whose ostensible object it was to take notes of them for publication; and the law gave him permission so to act, providing he issued public notice thereof at the commencement of his course; but never did he close the college gate in the face of any body on the occasion of his Introductory Lecture. Such a *coup de grace* was reserved for his successor, Mr. Sewell.

OBITUARY.

HELAS! another master-spirit of the veterinary profession has departed from amongst us—how few and far between do they arise, how rapidly do they disappear! Another human being who, both in the honourable discharge of private, and his enlarged views of professional, duties, dignified the name of man, has finished his earthly career. Thomas Mayer is no more!

Let not this expression, however, be misunderstood. It is of the material being, pursuing the even tenor of his way, gliding quietly and unostentatiously among us, alone we speak. His memory—the intellectual being—still remains with and is endeared to us by ties that never will be broken.

Thomas Mayer was born in Newcastle in 1791, and was educated principally at the Grammar School of that town. He may truly be said to have been born and bred a veterinary surgeon; for his ancestors, both on the maternal and paternal side, had long been practitioners of the art, and his grandfather had the veterinary medical charge of a regiment of German Hussars in the time of George the First. The rudiments of his profession were acquired under the care of his father, a practitioner of considerable skill, and who numbered among his friends the late Joseph Goodwin and Bracy Clark. But even at that early period his thirst for knowledge could not be quenched by the scanty streams of equestrian lore, and he was in consequence placed as an articled pupil with Mr. Mellard, an eminent surgeon at Lichfield, with whom he remained three years. During his attendance at the Royal Veterinary

College no opportunities of extending his information were allowed to escape. The lectures of all the eminent medical teachers then open to the veterinary student were eagerly and zealously attended : he became a member of the Westminster Medical Society, which led to the idea of his founding, in conjunction with Youatt and a few others, the Veterinary Medical Society, which, under a modified form, still exists. His success in practice was all that such a foundation had a right to expect. He was universally respected in his neighbourhood, and was enabled to retire from its more active duties some time before his death.

It is to Thomas Mayer we are indebted for the Charter of the Royal College of Veterinary Surgeons. Sterner reformers had, indeed, appeared before him, demanding improvements and alterations in the Veterinary College. That College had itself applied for a Charter to increase its influence and confirm its power. But, for the enlarged idea of a Charter based on the necessities of the profession, and constructed so as to enlarge its utility and enhance its advancement, we are indebted to him—alone, we were going to add ; but let us not, in our respect for the dead, forget the just claims of the living. Thomas Walton Mayer, the worthy son of his father, went hand in hand, not only as parent and son, but as friend and friend in carrying out the great and glorious work. Let this, however, pass—he will not regret should the elder branch have every iota of the honour due to both.

Did he retire when the victory was won, and rest content with his laurels ? Let his untiring exertions as Vice-President of the College, as Member of the Council, as one of the Board of Examiners, reply. So far from time having dulled his desire for knowledge, even after the last appointment had been accepted by him, he was continually occupied in reviewing or adding to his professional knowledge, to the last day of his life—and to the last day of his life did his zeal and anxiety for the well-doing of the profession extend. But three days before his decease our worthy Treasurer received a letter from him, in which he expressed his gratification at certain alterations now in contemplation in the by-laws, calculated to unite the body as a whole more amicably than had hitherto been done ; and the very day before, his old and valuable friend, Mr. Robinson, received a communication from him, reiterating the same gratification.

Considering his energy, his extended course of reading, and long and extensive practice, it is to be regretted that he abandoned an idea he once entertained of conducting a journal in conjunction with Professor Sewell ; having done so, however, we find the whole of his literary contributions to the profession are contained in *THE VETERINARIAN* : they range over a period from 1834 to

1847, and consist principally, besides his well-known Memorials on the subject of reform, and his Oration at the Veterinary Medical Association, of papers on the following important subjects:—Bronchitis in Calves and Cattle; the prevailing Epidemic among Cattle and Sheep; on Gastro-enteritic Fever in Pigs; on Pleuropneumonia; and on the Variola or Small-pox in Sheep; besides several valuable ones on the diseases of the horse. The decline of life brought to him an early autumn. Long-continued suffering and ill-health had early produced the sere and yellow leaf that soon must fall. For some time his condition had excited great anxiety in the minds of his family. On Thursday evening he complained of pain in his head and back; and resolved to send the next day for his medical adviser. In the morning, Oct. 13th, however, he was found lifeless, in the posture of repose, his countenance calm, and not a single feature ruffled, having, to all appearance, expired while asleep from the rupture of a large vessel near the heart.

Peace to his manes! His rectitude in life, his energy in the pursuit of knowledge, his zeal for the advancement of his profession, make us lament his loss as that of a brother who has left us a solemn and invaluable example of one who “had done justice and loved mercy, and walked humbly with his God.”

PROCEEDINGS OF THE COUNCIL OF THE ROYAL COLLEGE OF VETERINARY SURGEONS.

(QUARTERLY MEETING.)

Sitting of October 6, 1848.

Present,—The PRESIDENT, the TREASURER, the SECRETARY, Messrs. JAS. TURNER, CHERRY, sen., PEECH, SPOONER (Professor), SILVESTER, ERNES, ARTHUR CHERRY, and MAYHEW.

THE minutes of the former meeting being read and confirmed,

The President stated, that he had, in accordance with the decision come to at the last meeting, forwarded to Mr. Coulson the result of the deliberation on the proposal submitted to them by that gentleman, and to which he had received a reply, which he would now communicate to them. The reply was short, acknowledging the receipt of the documents, and declining the proffered interview, on the grounds that, having received the answer of the Council on the proposition, he had only to lay the same before Sir George Grey. Here, of course, the subject ended, so far as that particular point was concerned.

Mr. Arthur Cherry drew attention to the Registration business, which was now, and had been since the General Meeting, at a

stand-still; that in consequence of ill health he had not been able to enter into the subject before; but that now the Committee should be re-appointed, or that a Registrar be elected, as the time had arrived for the attempting to obtain an addition to the list already prepared.

Mr. Ernes said, that he had been a member of the Committee, but that the labour had been carried on by *Mr. Arthur Cherry*, and he could not see any one more fitted to be appointed as Registrar than that gentleman, and moved that he be appointed.

Mr. Jas. Turner seconded the motion, which was carried without opposition.

Mr. Arthur Cherry said he had undertaken the duties of Registration, not from any partiality for the office, but from its being requisite; that he never liked it, and the more he saw of it, from the apathy and indifference, the insults he had received, and the trouble given by nonsensical inquiries and expectations, he disliked it the more; but if any business was undertaken, however distasteful it might be, it ought to be carried out.

The Secretary laid a draft of the Registration Certificate before the Board, which was approved of.

The Secretary gave notice respecting certain alterations proposed to be made in the bye-laws, more especially relating to education. As this notice must, by the requirements of the Charter, be suspended for three months, no discussion on its merits ensued: this being deferred till the matter was brought forward in its digested shape.

Adjourned.

MISCELLANEA.

THE Editor has received from a friend the following copy of an ostler's account. Any of our friends unable to interpret the hieroglyph, and desirous of its decipherment, shall have it next month.

aosafada anagetinonimome . . . 6s.

A HINT TO FARMERS.

WHEN our calves and lambs are taken too soon from the dam, and turned, with little or no experience, into the pasture, they eat indiscriminately every herb that presents itself, and many are lost. Had they been suffered to browse a little while, or a little longer, with the mother, she would have taught them to distinguish the sweet and wholesome herbage from the deleterious and destructive. This is a point of agricultural economy not sufficiently attended to.

THE
VETERINARIAN.

VOL. XXI,
No. 252.

DECEMBER 1848.

Third Series,
No. 12.

LAMENESS IN HORSES.

By WILLIAM PERCIVALL, *M.R.C.S. and V.S.*

DISEASES OF THE BURSÆ MUCOSÆ AND SYNOVIAL SHEATHS.

[Continued from page 602.]

THE PATHOLOGY OF WINDGALL has already, from some observations we have had occasion to make, received considerable elucidation. In its first formation, and simplest form, windgall consists in nothing more than distention of the bursa through an inordinate quantity of its natural secretion. The bursa itself retains its normal structure; nor is the augmented secretion any thing more than the same straw-coloured synovial fluid found in the cavity in a state of health. That this inordinate secretion is due to *inflammation* of the bursa, as is usually asserted to be the case, is to us extremely doubtful. For our own parts, we should rather say that, generally speaking, inflammation, properly so called, has nothing to do with it. In our opinion, there is increased activity in the capillary system of the bursa—that sort of hypertrophic action which produces inordinate nutrition and secretion; under the influence of which fluid is emitted faster than it is absorbed, and distention of the sac is followed by increased growth and enlargement of it. And we are further of opinion, that this *dropsical* state of bursa, as it may be called, is dependent upon some increased action—not amounting to inflammation—set up in the joint to which the bursa is auxiliary, in consequence of some irritation which it (the joint) has, from some cause or another, been the seat of. Hence it happens that windgall, in its first formation, in young horses in particular, is usually accompanied with fulness of the joint to which the bursa is proximate, or with which it is connected. This we consider to be the case in young horses especially: in old and worked horses windgall, in another form, may be regarded as an

idiopathic affection, i. e., as a disease—if disease it is to be called—independent of the joint to which it may be contiguous. Since, however, the bursæ, particularly the large ones, have either from the time of birth, or as a consequence of work—occasioning rubbing and pressure upon them—communication with the cavities of the joints, any distention the joint itself, from over-secretion of synovia, will of course produce distention and enlargement of the bursæ in communication with the joint; a case in which the pathology of windgall becomes identified with articular disease or derangement.

Once filled to distention, there is not much likelihood of absorption of the effused fluid taking place; though in young and unworked horses bursal swellings do now and then, in the course of the animal's growth, disappear. In adult and worked horses, however, windgalls rarely vanish of their own accord. Once formed they become chronic; for months, years perhaps, remain *in statu quo*. At length, slowly, gradually, the parietes of the bursa, from being simply stretched, become thickened in substance, as well as enlarged in caliber; and the increase of growth, to which such alterations are to be ascribed, may go on to render that which was originally no larger than a marble of the size of an orange, and in some instances a great deal larger. It is probable also that, while such changes are going on in the size and substance of the bursa, alterations in its contents will become manifest. The synovial fluid, by degrees, acquires a deeper hue: instead of remaining a pale straw-colour, it comes to exhibit an amber or golden tinge. Flocculi of lymph may also appear in it, a layer of the same constituting the lining of the enlarged and now probably inflamed bursa. Indeed, in the course of time, by increase of this lymphous deposit, the bursa, instead of being a sac containing a liquid, becomes the inclosure of solid substance, or of matters partly solid and partly liquid. The tumour now, instead of being soft and elastic as it was before, is solid, hard to the feel; evidently, indeed, has undergone an established change of structure, out of the reach of all remedy, supposing its removal or diminution should be called for. This is the state in which we commonly find windgalls of the fetlock joints in old and hard-worked horses; a state in which they remain for years; nay, out of which it is but in comparatively few instances that they ever emerge, to change for one of a still more obstinate character, and one that may prove annoying or painful in a manner we shall hereafter point out. Of such tumours, that which was originally but membranous tissue, with the addition of no more than a lining of coagulable lymph, is converted into a fibrous structure, and from that into *scirrhus*. Even here, however, conversion does not stop. The *scirrhus*, in time, changes

its nature to cartilage: concentric layers of that substance are found lining the inside; and in the course of time the cartilage changes, perhaps, to bone. At least, such are the transformations which in windgalls of the fetlocks of very long standing, under the protracted aggravation of work, are very apt to take place. Our departed friend, Mr. King, veterinary surgeon of Stanmore, in his lifetime, shewed us a beautiful specimen of ossified windgall. The tumour, which consisted of disease of the bursa lodged between the perforans tendon and the fetlock joint, in many places exhibited osseous patches; and it interfered, from its situation, so much with action, that the animal, incapable of extending his fetlock, was compelled, in going, to tread solely upon the toe.

Notwithstanding these augmentations of substance and changes of structure the windgall, of the fetlock in particular, in many instances experiences, and notwithstanding the proportionate diminution that, in consequence of the depositions taking place inwardly, the cavity of the tumour necessarily undergoes, yet does not this cavity ordinarily become filled up and obliterated, but continues, greatly reduced of course in dimension, to exist and to contain fluid. This fluid may be but the natural secretion heightened in colour and thickened in consistence; on the other hand, when the tumours experience a repetition of injury from continued stress and strain upon them, coagula of blood are frequently found mingled with the secretion, exhibiting together that grumous character Gibson called "corrupt jelly." In windgalls that have become not only solid, but firm and hard to the feel, from their long duration and chronic character, is sometimes found, according to Hurltel d'Arboval, a white chalky matter (*semblable à du plâtre*), though, according to him, this only occurs in cases in which the joints and tendons have become stiff.

Our esteemed coadjutor, Leblanc, who has made these morbid changes his study, says, in giving an account of them, that he has observed the synovial membranes to lose their transparency and become variously clouded; in the same articulation some portions of the membrane being of a vermilion red, while others exhibited a cherry red, a deep red, a yellow, and now and then a black aspect—such changes being particularly observable about the synovial fringes in the joint. Frequently, gelatiform infiltrations are observed underneath the membrane, within the fringes and the cellular tissue by which they are surrounded; veritable false membranes of greater or less extent are likewise to be seen within the articular capsules. These membranes, adherent sometimes in places, at other times quite free, present great diversity of tinge and consistence: frequently they exhibit an analogy to the fibrine of agitated blood; at another time they preserve the aspect of

highly smooth, white, hard, and lenticular bodies, floating at large in synovial secretion. In inveterate windgalls which are fully developed, and whose parietes, formed into a multitude of little caverns as it were, have become cartilaginous or were osseous, the synovial membrane and articular cartilages are destroyed, and the surfaces of the bones worn as if from radiated motions. Such wear of the cartilages and bones is likewise to be observed in old horses in whom there is even no suspicion of joint disease. The synovial fluid is also altered: ordinarily, it is thinner and of a deeper hue than in its normal state.

WINDGALL IS RARELY PRODUCTIVE OF LAMENESS; so rarely, indeed, that horse persons in general look upon such swellings, frequent as they are in horses of all ages and all kinds, with that sort of complacency which denotes all absence of apprehension in their minds on account of such blemishes. The washerwoman's arms yield strong evidence in favour of this view of the harmlessness of windgalls, and pathological investigation into their history and nature fully bears out the same views. The bursæ are parts in their normal state insensible. "The bursæ, when unavoidably cut in operations," says Dr. Munro, "have appeared to be insensible, and I have observed them swell without considerable pain. But sometimes, as in rheumatism, they swell with great pain*." Now, in horses we know they commonly "swell without pain" or lameness; and this happens from the circumstance, we believe, of inflammation not being an accompaniment of such swelling or distention. In the young and growing horse, the joints, and bursæ along with them, become "dropsical," as we may call it, from "weakness," after such manner as has already been explained; in the adult and worked horse, from the excitation of an action augmented or hypertrophic, but not to be called inflammatory; and in neither case, in the absence of inflammation, is pain or lameness a consequence. Years roll over such horses' heads, and their windgalls remain *in statu quo*; save and except the internal changes tardily going on in them, which, being brought about without inflammation, are still, most likely, unproductive of lameness.

This immunity of windgall from pain or lameness, however, has its limits. We know there are states and times when the old and worked horse suffers from his windgalls; and we likewise know that there are species of windgalls, connected more particularly with the synovial sheaths of tendons, in which lameness is a prominent symptom even from their very commencement. To these respective cases we shall have occasion to advert when we come to treat of particular windgalls.

THE SITE OF WINDGALL will, of course, be confined to such

* Op. cit.

localities as are furnished with bursæ mucosæ or synovial sheaths: these however in the limbs, in the vicinity of the various joints in particular, are so numerous, that divers are the situations in which windgalls present themselves. In some sites, however, they are so frequent as to be, in horses in work, oftener present than absent; while in others their presence is so rare, that but few or no examples may happen to occur to a practitioner in the course even of his lifetime. The ordinary seat of windgall, everybody, in or out of the profession, knows is the fetlock joint: in fact, so common is this site, that, when "windgall" is spoken of, this is the description at once taken for granted to be referred to. The next most frequent site—perhaps, in young horses, a more usual one—for windgall is the hock-joint. *Bog-spavin, thorough-pin, and capped hock*, are no more than so many windgalls occupying different localities about the hock, and differing in their nature and importance according to their several respective connexions. Next in priority comes the elbow; then the knee. Last of all, the front of the fetlock, and in the heel.

SPECIES.—One windgall differs from another in character and consequences, not only as regards the part or tissue each respectively occupies, but in the relations which from its particular locality each respectively has with surrounding parts and tissues. Some windgalls, from their proximity to joints, either from their first formation communicate with the cavities of such joints, or in the course of time do so afterwards; others there are which maintain themselves free from all such communication, notwithstanding they are in the vicinity of articulations. Others, again, there are which from their situation are altogether independent of the joints.

Another marked distinction between windgalls is self-evident in the circumstance of some being accompanied with lameness, while others there are—and these latter, as we have already intimated, constitute a vast majority—which are hardly ever known to be productive of lameness, at least so long as they continue to remain in that *statu quo* they ordinarily present themselves.

THE TREATMENT OF WINDGALLS, unless lameness arise from their presence, is a matter little heeded by professional persons; nor is it one sought after much by persons out of the profession, unless at such times as horses are growing "stale upon their legs," and then the presence of windgall is frequently made a pretext or necessity for blistering or firing. The windgalls, being the only anomalies discoverable by such persons, are naturally enough regarded as the causes of the "staleness," and as naturally are desired to be removed. It has been shewn, however, both as the result of experience and pathological investigation, that windgalls, of a kind that do not produce lameness, or inconvenience by their magnitude, or offend the sight by their situation or their size, in

point of fact require no treatment : to which another reason may be added for letting them alone, and that is, that in general, particularly when they are chronic, they prove exceedingly stubborn and intractable under treatment of every kind. If windgalls are to be treated at all, the earlier after their formation remedies are employed the better the chance of their reduction or removal : hence it is that in young horses such tumefactions are frequently entirely got rid of, not more, perhaps, by treatment than by attention to any circumstances or agents to which they may appear to owe their production. Taking such animals off any work that may appear to be too much for their limbs to sustain ; remedying any injurious or mal-position into which their fetlock joints may have been thrown either by shoeing or the improper slant given to the standing of their stalls ; preventing kicking in the stall, pawing, &c. ; is all that is frequently required for the cure of such cases as capped hock, capped elbow, tumefied knee, &c. ; these or other causes, if there be any, being removed, we may look forward in young subjects, and in adults sometimes, so long as their windgalls are not become chronic, to more or less spontaneous subsidence of them. Indeed, it frequently happens that, as young animals grow and alter, so their windgalls in part or altogether disappear : whereas in aged horses—in subjects in whom they have “grown with their growth and strengthened with their strength”—it is a forlorn hope to set about attempting to get rid of them ; for even should any trifling reduction in their volume be effected by medicinal means, there remains great probability of their returning to their former size whenever the animal is put to the same hard work again to which the tumours owed their production.

Nevertheless, if lameness be an accompaniment of the bursal swelling, or if it be such as either from its volume or situation incommodes the animal in any way, or offends his master's eye, treatment must be adopted ; and we know of no better, when the case is recent, than such as is a combination of the antiphlogistic and the stimulant. We have repeatedly found, for the reduction of recent bursal tumefaction, a good blood-letting as topical as it can be made, combined with the operation of a brisk cathartic upon the body, and that of a blister upon the windgall itself, most effective in reducing the enlargement. We are not friendly to fomentations, the best of which in such a case would be the spongio-piline (of which, by the by, we have not yet had sufficient trial to enable us to offer any opinion about in respect to windgall) ; neither have we experienced the same happy results from refrigerant lotions and bandaging as we have from vesicatories. And so soon as the influence of the blister has subsided, it is an excellent practice to renew the excitement by daily well rubbing into the surface of the tumour some ointment or embrocation

known to possess the power of bringing the absorbents into action. Hurtrel d'Harboval speaks in high terms of commendation of a mixture of the volatile oil of lavender and oil of turpentine in equal parts. From twenty-five to thirty drops of this mixture he directs to be well rubbed in for nearly half an hour; the horse afterwards to be walked out until the irritating effects of the application subside: the same to be repeated again in the course of the day, the part being kept covered up during the interval by a woollen bandage firmly pressed upon it.

The best applications we know of are the iodine and strong mercurial ointments, some practitioners preferring, to their separate use, availing themselves by mixture of the combined action of the two. Whatever ointment or liniment—for one or other is the usual and best form of application—be used for windgall, it must be borne in mind that *friction* has a good deal to do with its efficacy: without being well “rubbed in,” little good can be expected. Indeed, it is an excellent practice to rub the part for some time before applying the ointment; the inungation being doubly effectual upon a surface thus warmed, and whose pores, through friction, have become cleansed of any obstruction, and so rendered more bibulous. And in situations where it can be conveniently applied, *pressure* likewise, by bandage or otherwise, will be found an important agent in promoting absorbent action. An ointment which has been strongly recommended to us for the dispersion of bursal swellings that are becoming chronic, is composed of the bi-chloride of mercury and simple ointment or hogs' lard, in the ratio of 3i to ʒi. In using an application of this kind, however, the same as in the case of an ordinary blister, we must bargain for the loss of hair from the parts: such a vesicatory, however, may be used as with caution to guard against this consequence. The *acetum cantharidum*, compounded and used in the manner prescribed at page 180, will not disturb the hair.

Should such measures as we have recommended fail in accomplishing our object, the question might be raised of how far it would be desirable or politic to employ cauterization: and, to carry this into effect, either the windgalled parts may be fired in the usual mode, or the hot iron may be applied over the surface of them, with a piece of hog's skin interposed, so as to imitate pretty closely what surgeons call the *moxa*. It rarely happens, however, that we are called on to use the actual cautery for windgall alone: generally speaking, the windgalled legs are, at the same time, from other causes, *failing* legs; and very often there are present the accompaniment of thickened and rounded sinews, and that for these causes is the firing especially required; the windgalls being probably more secondary than primary in the causation of the failure.

A summary mode—and, were it not for the danger that too frequently attends it, the most effectual one for the removal of windgall—is an operation having for its object the discharging of its contents through an external opening, and the subsequent destruction of the secretory powers of the membranous sac composing it. And in such a case as capped hock, or capped elbow, or any insulated bursal swelling unconnected with any joint or synovial sheath, such an operation has been followed by the happiest results. Not only has the enlargement been in a comparatively short time got rid of, but the fruitful producer of the fluid has been, at the same time, utterly destroyed. On the other hand, it is our duty to observe that sometimes, instead of pleasing results like these, have supervened on the operation frightful and alarming consequences. Inflammation has seized the opened sac of the windgall; the part, and with it the limb, has become enormously swollen; the system has sympathised, and fallen into a state of irritative fever; life itself even has been threatened through what has appeared so simple an affair of operation. Occasional results such as these have, in a great measure, deterred us from pursuing such practice: some French veterinarians, however, appear to have been more venturesome, whether or no on account of being more successful in such undertakings, we shall make it our business hereafter to inquire.

Certainly, no operation of the kind ought to be undertaken so long as any inflammation is perceptible in the part; neither, on the other hand, would a case which had become chronic, wherein a great deal of thickening and alteration of the capsule of the windgall is discoverable, be a fit one for operation. The capsule, indeed, should be but slightly or hardly at all altered, and be entirely free from inflammation, while it is filled to distention with redundant fluid; and then, we should say, taking it for granted that nothing in the general health or condition of the animal forbids it, that such was a case for the operation, providing we felt confident enough of success to engage in its performance.

Of the two modes which have been proposed and practised for opening the sac, *incision* and *puncture*, the latter is generally preferred. The formidable wound, and consequent exposure of the cavity of the bursa, incision inflicts, now and then excites awful inflammation in the part, as well as tumefaction of the whole limb, and alarms us for the result; while the only advantage over puncture incision holds out is the impossibility of any fresh collection of fluid so long as the wound be kept open.

PUNCTURATION, whenever operation is determined on, is, for many reasons, safer than incision; and either a very small trocar or an acu-puncture needle is the best instrument we can use for the purpose. And in regard to the site of puncture, we have,

for our own part, generally chosen the inferior side, or most dependent part of the tumour. This, however, we are told by Hurler d'Arboval is wrong. He prefers the *superior* part of the tumour: assigning as his reason, that the fluid ought to be forced out by pressure rather than be suffered to run out of itself, and that as soon as it be all pressed out, great care ought to be taken to close the wound, and to keep applied for some days a compress and bandage upon it, adding, if we like, some discutient lotion. He objects to the aperture being made beneath, because the fluid would then run away by itself and prevent any healing, and might cause it to become fistulous.

A SETON, passed through from an aperture above to one below, or from side to side, would certainly have the effect of giving vent to the discharge as it became secreted; but, exposing to the air and creating suppurative action in such a joint-like cavity as a bursa, we regard as highly objectionable and dangerous practice: we have known the worst of consequences ensue from it, and we have, on that account, for some considerable time, abandoned all thoughts of setoning synovial structures.

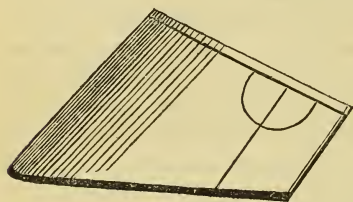
Should it happen, after the discharge of the fluid, that the wound made by the instrument heals forthwith, fresh secretion would be certain to be poured out, and the sac to become re-filled. More commonly, however, it happens that the secreted fluid continues, in part, to find escape for a few days through the puncture, in the course of which time inflammation sets in and closes up the opening, the only danger being now of greater inflammatory action and swelling following than is agreeable either to our patient or to ourselves. Antiphlogistic treatment, constitutional as well as topical, will, of course, in such a case be called for to a given extent; the object being, not to drive away the inflammatory action, but to keep it within such limits as shall conduce to the end we have in view; viz. the effusion of lymph into the sac, and not of pus, and through that the adhesion of its sides and ultimate obliteration of its cavity. On the other hand, should it so happen that the inflammation is insufficient for the object we have in view, we have it in our power to produce such in the part either by some external application or by some stimulant or escharotic injection. All this, however, as well as the other points of treatment, will have to be more defined and detailed when we come to treat of individual windgalls.

[To be continued.]

FRONTAL AND LATERAL FISSURES IN THE HOOF,
KNOWN UNDER THE GENERAL TERM OF "SANDCRACK,"
EASILY AND SPEEDILY CURED BY ISOLATION.

By ROBERT READ, *M.R.C.V.S., Crediton, Devon.*

HAVING for a series of years adopted the usual and commonly known method of curing sandcrack, and other fissures of the crust, without the result of such treatment being so satisfactory as I could wish, since the cure proved long and tedious, and considerable rest also was occasionally required in obstinate cases, which length of rest turned out of considerable importance, as affecting the value of the animal, from the loss sustained in not having his services, particularly with the farmer;—I say, with these facts before me, I was led, about seven years ago, to employ a new method, and I am pleased to be able to say it has proved of the most decided benefit: in short, it is a certain, safe, and speedy cure. The remedy consists in simply isolating the fissure within the segment of a circle, by the firing iron, as represented in the cut annexed.



The best plan is to do it with the *heel* of the firing iron, beginning at the coronet with either extremity of the segment, bringing the iron to a finish in the centre. The iron should be at a strong red heat, and it must be carried through the horny crust until it

reaches, in a trifling degree, the sensible laminæ, and so throughout the entirety of the semi-circle. As you recede from the coronet, so in proportion you will require to deepen the fissure in the wall or crust. The iron should be re-applied about once in a week or ten days. The first effect desirable to be produced is a bulging of the crust around the coronet within the segment, and when once this is fairly established, the cure may be said to be effected, it being seldom necessary to apply the cautery afterwards. The old method of making a line with the iron across the fissure, it will be plainly seen on reflection, cannot prevent the opening and closing of the fissure during the action of the foot; whereas, confining the fissure within a segment of a circle, completely effects this object without having recourse to any other aid. If the horse be not very lame, he may continue his usual work on the road or farm. No tar cord, or strapping, or alteration of the shoe is required to limit the motion of the crust; all movement being suspended within the segment, and especially after bulging has commenced.

In the more severe forms of sandcrack you need not fear to use the iron. If fungus sprouts from between the fissure, apply a strong solution of the nitrate of silver with a small brush throughout the whole length of the crack. I find, even though inflammatory action is going on in the part, that poultices and other moist applications do not afford so much relief from pain as a solution of caustic; for this at once destroys the source of irritation and pain.

Since I have pursued this plan I have had occasion to observe scores of cases that have been under the treatment of farriers and empirics for twelve months and more without any relief, with, indeed, no chance of re-union of the fissure; when by subjecting them to my plan of treatment a cure has been readily accomplished, and permanently too. Thinning the sole and rasping the crust is objectionable, since it favours the dilatation and contraction of the fissure. I therefore never allow the sole to be pared, only the circumference of the crust to be rasped down, and the shoe put on again in the common way. Having thus brought my method before the profession, I trust some person will give it a trial, and report through the pages of *THE VETERINARIAN* its merit or demerit. Few veterinary surgeons there are but who have had to do with some obstinate cases of sandcrack. I trust this operation will prove as effectual in other hands as it has in mine. I entertain no doubt on the matter whatever, providing the operation be properly formed; it being one founded on scientific principles.

Crediton, November 8th, 1848.

*** The very first case that occurs in our own practice shall be subjected to Mr. Read's operation. We think, with him, that the opening and shutting of the hoof in action has a great deal to do with the repair of the "crack," and this his method of procedure appears to us well calculated to arrest.—ED. VET.

INFLUENZA, FOLLOWED BY RHEUMATISM.

By J. W. GLOAG, V.S., 11th Hussars, Hounslow.

To the Editor of "The Veterinarian."

Nov. 11, 1848.

Sir,—SHOULD the accompanying case possess, in your estimation, any interest, it is much at your service.

I have the honour to be, &c.

E 17, grey mare, aged three years, belonging to the 11th Hussars, was admitted September 24th with symptoms of influenza.

There was great weakness across the loins—a feeble quick pulse—dung dry and small—great distress, and accelerated breathing on motion—the membrane lining the nostrils dry, &c. I was absent from home when the case occurred, but the symptoms were daily minutely recorded. A mild alterative ball was given (resin 3ij, nitre 3ij, aloes 3ij) and some warm soap and water injection thrown into the rectum; and the head, according to my usual practice, was very frequently steamed over scalded bran put into a nose-bag. The mare was placed in a loose box well ventilated, and her body was warmly clothed, and legs well hand-rubbed, and a double set of flannel bandages applied, extending to the knees and hocks. Diet, warm bran mashes, and water constantly kept within reach.

25th.—The symptoms have continued to get worse. The breathing has become very hurried, so much so that it was thought absolutely necessary to bleed the mare. Only four quarts of blood were abstracted: the blood being black, and the animal bearing its loss very badly. The steaming of the head was continued, and the general stable treatment the same as on the previous day. The bowels had been moved during the night, but the dung was not of a proper consistence. However, as bleeding had been resorted to, nothing more was done than giving warm soap and water injections. No further medicine administered.

26th.—In no way relieved; on the contrary, the mare appears worse in all respects—the breathing extremely hurried—pulse 80, very small and weak: she has not lain down, and she appears in great pain and distress, and when made to move evinces soreness, and groans. The bowels are confined. Resin 3ij, nitre 3ij, aloes 3ij, given in ball, and a soap and water injection administered; the head steamed constantly, as before. The front of the chest, and half way up the neck, well blistered. The body and legs kept warm by clothing and bandages, as before.

27th.—Purgation commenced during the night of the 26th. No change has taken place in the breathing. The blister has not acted. Pulse small, quick, and indistinct. Both sides are blistered. Purgation continued all day; the mare was well supplied with gruel.

28th.—I returned home late the previous evening, and in the morning early I saw this case for the first time. I found the mare breathing very short and quick, notwithstanding I was informed she was evidently somewhat relieved in this respect from what she had been: the pulse was 80, and scarcely to be felt. Purgation was still going on freely—the membrane lining the nostrils was dry and livid. The mare had dreadfully fallen away in flesh. The eye, with the whole expression of countenance, betokened anxiety.

The blisters had not taken any effect, and I resolved to endeavour to arrest the purgation, at all risks. I gave pulvis cretæ composita cum opio ʒj in warm thick oatmeal gruel. The mare had great thirst, and some thick oatmeal gruel was made, which she took. The steaming of the head was repeated frequently, according as the animal would bear it; and the legs thoroughly hand-rubbed and bandaged.

In the evening the mare was still purging. The drench was again repeated. The mare, notwithstanding, appears more lively, and has taken some gruel.

29th.—The purging seems to have subsided, and the breathing is somewhat easier. I need not continue detail further; suffice it to say, from that date amendment took place. The steaming of the head was continued, and the greatest attention paid to all stable comforts. A healthy discharge appeared at the nostrils, and the mare was in all respects convalescent, until

Oct. 8th, when a new train of symptoms became exhibited.

This morning, on visiting the mare, I find her very lame in the near fore leg; most acutely tender too, for on passing my hand down the leg I find her wince on the slightest pressure. The tenderness seems to be greatest just above the fetlock, on the inside, where I feel an enlargement about the size of a small pea, which is most exquisitely tender. The pastern arteries are throbbing violently—the mare is panting with pain—the eye is anxious—partial sweats bedew the body—and the pulse is much quickened, and hard. Knowing that no accident could by possibility have occurred, and having had many cases of this kind before, I considered the case at once to be one of those rheumatic affections of the bursæ and ligaments of the fetlock joint occasionally occurring after pleurisy or influenza. I had the shoe taken off, and the foot thoroughly searched. The mare was bled from the toe to four quarts, and fomentations were unremittingly used through the means of spongio-piline, wrung out of very hot water, and kept applied constantly to the leg by an over-bandage. The dung is dry and small. Half a dose of physic is given, and some soap and water injections thrown up, and a patten shoe is put on the foot with a few nails loosely driven.

9th.—Bowels acted on. The mare is in the greatest pain: she pants and sweats, and lies down and moans. A man is constantly employed in fomenting the leg and attending to her. She is in a loose place, and has warm mashes.

10th.—Pain as yesterday. The bowels are rather costive. With the view of keeping the bowels in moderate action, and as an alterative, the following ball is given twice a day:—Calomel gr. x,

red sulphuret of antimony $\mathfrak{D}j$, guaiacum powder $\mathfrak{D}ij$, linseed meal $\mathfrak{z}ij$, turpentine sufficient to make a ball.

11*th*.—Pain not quite so severe. She lies down a great deal, and has much difficulty in rising, being afraid to put the leg to the ground to assist her, and in attempting to move in the box she draws her hind legs completely under her, and hops with the other leg. The urine is very turbid and white. I tested its specific gravity by the urinometer, and found it to be (as compared with water which is calculated at 1000) 1036.

12*th*.—Much the same as yesterday. Fomentations to the leg as before, and continue the balls twice a-day.

13*th*.—This morning I find the near fore leg much less tumefied, and not so tender to the touch; but the off fore leg, about the fetlock, is now extremely tender, and it is swollen the same as the near fore originally was. The mare cannot be induced to move, and is in such great pain that in her attempts to move she brings both hind legs completely under her, and makes a kind of jump forward. Fomentations are kept up as before, but now to both legs. I could not lift the off fore leg to bleed from the foot, as she could not bear her weight on the near fore; for, notwithstanding the great pain and tenderness on pressure had somewhat subsided in the near fore leg, yet was there evidently great inflammation still existing.

14*th*.—The animal remains as yesterday, and as the difficulty of moving about, as well as in lying and rising, was so very great, I thought the mare would be easier in slings; she was accordingly placed in them, and they afforded her great comfort. An easy long shoe, with thickened heels, is applied to the off fore foot, and fomentations are unremittingly continued. The balls, also, are continued twice a day. I need not further pursue the daily treatment. Sometimes, after fomenting with very warm water, the animal appeared in greater pain than before. I then tried the effect of cold water, which seemed to answer better, in consequence of its having some effect in checking the tendency to the secretion of synovia, which was distending the capsules and bursæ, and pressing upon the inflamed inelastic fibrous tissues and nerves. The mare continued in slings until the 28th October. The balls were administered twice a day, and she continued to rest perfectly quiet in the slings, always lying in them, and throwing her whole weight upon them, except when feeding. During this period both hocks became very painful and much swelled.

29*th*.—She is taken from the slings, and suffered to hobble about a paddock in front of her box, just as she pleases. Medicine is discontinued, she made sad attempts at moving about at first,

going on her heels, and drawing her hind legs quite under her at each step; but she has considerably improved, she has got thick heeled shoes on both fore feet. From the 28th October until the present date she has continued to slightly amend; yet she is still very lame. I have been using bandages of linen constantly kept saturated with cold water to the legs for some time, with, I think, good effect. The mare lies down a great deal. The knees are now swollen, and have been so for some days; yet they do not appear tender. The mare feeds well on her warm mash; though when she lies down she moans a great deal, which I should think is partly from habit. Whenever she rises it is with great difficulty, with a knuckling over of the fetlock joints; being afraid to place her weight on the limbs. After she moves about a little she places the foot to the ground more firmly. On examining the legs we find a great deal of thickening around each fetlock joint, and about the tendon. The near fore fetlock is not, however, painful to pressure; but the off fore fetlock is extremely sensitive, the slightest pressure about the joint giving great pain. I intend now to try the effect of blisters to the joints.

Remarks on the foregoing case.

I consider this case to be one of those rheumatic affections occasionally met with in the horse. Mr. Castley directed attention to it under the head of metastasis of inflammation. Mr. Percivall has written upon it, and considers it to be rheumatism. The latter is, I think, the proper account of it; and if we consider the general features of the disease and its erratic character, we shall find it in all respects analagous to rheumatism in man. The pleura is composed of white inelastic fibres and cellular tissue, which accounts for the great pain present in pleurisy, the parts not allowing of expansion when under inflammation, the nerves and fibrous tissue being thereby compressed. We know that there is the greatest sympathy existing between parts of the same structural formation although distant from one another, examples of which may be shewn in many instances. How often in pneumonia and affections of the mucous membranes do we find that the smallest dose of aloes will purge immoderately. How careful and prudent is the veterinary practitioner obliged to be in this respect. Sometimes we find inflammation of the laminæ a sequel of inflammation of the lungs; but I believe in these cases, if they were properly investigated, they would be found to arise after disease of the pleura or pericardium, or that those parts were involved, parts similar in structure to the fibres of the sensitive laminæ.

In pericarditis, too, how frequently has lameness suddenly

appeared in the hind leg, attacking the joints. Cattle, also, are very subject to metastasis of inflammation or rheumatism, under the name of joint felon, after inflammation of the lungs or their surrounding tissues. In all these cases it results from the intimate sympathy existing between parts of similar structural formation. In rheumatism of joints, occurring after inflammation of the pleura, it generally arises from the tone of the animal powers being so much weakened, by the result of disease or treatment, that there is not sufficient power left to resist this innate influence and tendency which parts of similar structure have to take on similar disease. I think if the primary disease could be combatted without too much lowering the animal tone, that there would not be the liability to take on these diseases. We generally find that the subject of these affections are animals much lowered by disease. In this case the animal had been bled, and also purgation had commenced with the smallest dose of aloes, and this purgation would, no doubt, soon have ended fatally if left unchecked. I have had several of these cases before, and long before I knew or understood any thing of their nature I can remember them well: it is to Mr. Percivall we are indebted for a clear elucidation of their nature. The first case I can recollect was a young troop mare of the 10th Hussars, affected precisely as the foregoing case, in which, after endeavouring by blistering, firing, turning out, and a treatment of twelve months' duration, I could effect no good, permanent thickening around the fetlock joint and along the tendon was the result, and the mare, never having done a day's work, was cast as useless. This case puzzled me very much at the time, for it had all the appearance of a most violent strain of the back sinews, which I knew by no possibility could have happened; and I remember the peculiar shifting of the lameness from leg to leg without any obvious cause. I have had several cases of late years, and they have always been tedious, troublesome, and uncertain affairs, requiring long rest and extensive counter-irritation after the first severe inflammatory symptoms had passed over. Permanent thickening of the joint is too often, however, the result. I have noticed the intense soreness existing on pressure on the internal part of the leg just above the fetlock joint, and that there was in this case an enlargement felt under the fingers about the size of a small pea, exquisitely tender: this enlargement I have noticed before in other cases, and I suppose it is the sheath of the nerve enlarged and thickened.

The great pain existing in these cases arises from the distention of the capsule and bursæ by synovia, which presses in every direction upon the highly inflamed inelastic ligaments and fascia.

I mentioned in this case that I had tested the specific gravity of the urine by the urinometer. The urine throughout this disease

has been turbid and white, with much deposit: I believe that many valuable results may be obtained by a careful analysis of urine in disease. In rheumatic affections in man, the urine is always found different from health; and by the careful practitioner its character in these complaints is daily made an object of study. The most interesting results are deduced from this examination, and the analysis of the urine is reduced by certain tests and tables to the greatest simplicity. Why should not equally beneficial results ensue from the analysis of the urine of a horse under certain diseases? I merely make this observation to direct the attention of the profession to it. In this case I did not find that there was such a wide difference in the specific gravity from the urine of a horse in health as I expected, but visibly there were some great changes going on, the urine being turbid and white, with a heavy precipitate. Certain products are necessary to be eliminated by the kidneys in health; and if we find any of them in excess or wanting, or that the specific gravity of the urine is too low or too high, or that the urine is formed in excessive quantities or the reverse, our endeavours should be to give such medicinal agents as will bring about this healthy action.

GENITAL AND GENERAL VISCERAL DISEASE IN A YOUNG SOW.

By JOHN TOMBS, *M.R.C.V.S., Stratford-on-Avon.*

To the Editor of "The Veterinarian."

Dear Sir,—WHILE attending a patient on the 10th of last month, I was asked by the owner to inspect the inside of a young sow that was killed the day before, she being in the last stage of disease. The short history of the case is, that she had one litter of pigs, three in number, and that she went on very well until she was put to the boar again, in August last: from that time she became sick, and gradually grew worse, when humanity dictated the propriety of destroying her.

Internal appearances.—Small intestines inflamed, and adherent to the parietes of the abdomen by congealed gelatinous matter, resembling size. Uterus thickened, hard, and its exterior surface black: when cut into it was found full of thick matter, of a brownish pinky colour. Ovaries and Fallopian tubes diseased; bladder crammed with thick white pus; thorax filled with a serous effu-

sion mixed with flakes of pus. Lungs nearly all absorbed, and the remnant of them putrid, and adherent to the ribs: pleura costalis highly injected.

I am, dear Sir,
Your's, respectfully, &c.

November 15th, 1848.

NORTH COUNTRY PRESCRIPTION.

To the Editor of "The Veterinarian."

Sir,—AS a counterpart to your "Ostler's Account," given in the last Number of "THE VETERINARIAN," I inclose a veritable recipe lately sent in to a respectable druggist by an individual who has not long since given up his other avocations to devote his time exclusively to the doctoring of horses and cattle. I subjoin, for the sake of the printer, what I believe to be a literal rendering:—

Ameiked tartr 1 and a haff Dram
row Barb 1 Dram
Shougr lid 1 ouz
Contreted vniger 2 Gills.

If such be a sample of what may be called a favourable *North-country* specimen of that class which Mr. Cherry proposes raising up with his registration lever, no wonder that many of the regularly certified members of the profession wince at being made *fulcra* for such a purpose.

Your's, truly,
W. CUMING, V.S.

Ellon, Aberdeenshire,
11th Nov. 1848.

CURIOUS CASE OF INCURABLE LAMENESS AND DISEASE FROM THE PRESENCE OF HYDATIDS.

By J. P. VINCENT, M.R.C.V.S., Devizes.

To the Editor of "The Veterinarian."

Sir,—IN the January number of this year's VETERINARIAN, a case is published of entozoa, discovered within a cyst under the synovial membrane of the flexor perforans tendon of the fore leg of a young cart-horse, occasioning excessive lameness; also of

the same parasitic productions within tumours upon the poll and shoulder, whereby the animal was rendered comparatively useless, and was consequently destroyed.

You did me the honour, in an editorial appendage, to take especial notice of the case, and remark upon it as unique, and of a hitherto unrecorded description in veterinary pathology: at least such is my impression. The number of *THE VETERINARIAN* is from home.

Another case of the kind having come under my cognizance, I take the liberty to forward the leg for your inspection and preservation. A few observations as to the history, treatment, and singularity of the case, are perhaps necessary.

The horse, a chestnut cart-bred gelding, was the property of the same gentleman, Mr. S. Akerman, of Patney, who bred the other, the subject of the January memoir. They were of the same age. were depastured together, and were both lame for a long period. Upon referring to my books, I find this horse has been lame nearly two years and a half; not so much so, however, but that he could be occasionally made useful. In addition to his lameness before, his gait posteriorly was paralytic.

In May 1846, from supposed inflammation of the capsular membrane of the flexor tendons, he was locally bled, physicked, and ordered fomentations, and a high-heeled shoe.

In June, the liquid blister was applied.

In July, he was turned out to grass: subsequently he was put to work.

Sept. 1847.—A mercurial liniment was applied daily.

In *October* and *November*, the like; with iodine ointment in combination.

Dec. 30th.—A mild mercurial ointment to be daily repeated.

1848, *Feb. 16th.*—The ointment was discontinued, and the horse considered equal to do light work again.

Aug. 16th.—The same unguent was ordered to be repeated daily, the leg having become much enlarged from work.

Sept. 12th.—The like, with iodine ointment.

Oct. 5th.—After a consultation with the owner, who could not concur in opinion with me that the disease was similar to that of the grey horse*, it was settled that he should be fired.

Nov. 8th.—He had been worked a few days (slightly lame), and was taken into the water to wash the clay from his legs, after his day's work was over; when, from some hitherto unexplained cause (most probably his paralytic affection), he became almost suddenly drowned.

* For an account of which case, see "*THE VETERINARIAN*" for Jan. 1848, vol. xxi, page 3.

After the impressive lesson I received from destroying the grey horse in the autumn of 1847, it became a settled conviction in my own mind that the two cases were identical in character; and with this conclusion, I resolved upon an endeavour to saturate the leg with mercury, by continual inunction, with a view of destroying the parasitic family within it.

In August, I became still more confirmed in the soundness of my previously expressed conviction, from the bagged appearance of the leg in different parts below the knee. In particular, inside the leg, immediately under the knee, was situated a soft tumour-like bag filled with fluid, immediately beneath the skin. I had the full inclination to lay it open: what might have been the result of such an act it is impossible to say; certain it is, I should have become fully acquainted with the nature of the malady I was treating; but, by a reference to the leg, it will be seen that the opening of one cyst would not have been alone sufficient, since there are apparently several; and if, in the cutting these parts without the consent of the owner—whom I could seldom see, on account of his being often confined to his room with severe asthma—great irritation, and perhaps death, had ensued, I should have only reaped a load of censure for my temerity. It was as well that a better discretion prevailed; since, in a conversation afterwards with Mr. Akerman, I found he was indisposed to concur in opinion with me, as before stated, that it was a similar disease to that which affected the grey horse, because, as he said, of its rarity: and, after some discussion upon the point, it was arranged that the leg should be fired. The sequel I have narrated.

After the horse's death, Mr. Akerman very properly sent me the leg for inspection. On dissection, I found the part I wished to open was a perfect cyst, filled with the same linseed oil-like fluid, and white bodies, described in the grey horse's case; also, that there was a partially condensed mass of these bodies, somewhat agglutinated together, but easily separable by careful handling, floating in the interior of the cyst. By placing the mass in water, and moving it about, the white bodies became more distinctly visible, and were readily detached: but, Mr. Editor, I leave it in abler hands to make further comments; merely adding, that W. G. Everett, Esq., M.D., of this town, upon inspecting the leg to-day, considered the cyst a species of hydatid, and stated that he had seen a nearly allied kind in human muscle.

I am, Sir,

Your most obedient servant, &c.

Devizes,
15th Nov. 1848.

P.S. I have replaced the cyst which I have spoken of as dis-

sected out by me below the knee. I should also add, that, for the sake of rendering it as little cumbersome as possible, I was about cutting the leg through at the knee ; but, coming across another lot of white bodies in the tendon, I desisted, and have sent it as it is.

* * * Lodged in the posterior parts of the section of diseased limb Mr. Vincent has been so kind as to send us, we find three cysts, one above the knee joint, of smaller size ; two below it, either of them large enough to hold a moderately-sized kidney potato, in whose form, though irregularly from being sacculous within, they are shaped. Their parietes consist of the fascia and cellular tissue in the vicinity, and their interior surfaces are as smooth almost as the linings of joints. Within their cavities are conglomerate masses of a pale, brownish, flesh-coloured hue, looking not unlike, at first sight, the convoluted surface of the cerebellum ; but proving to be when examined, and particularly when immersed in water, composed of agglutinated membranous corpuscles, which we are of opinion, with Dr. Everett, are species of hydatids. The case is curious, and, no doubt, rare ; though, now we have seen this specimen—not having seen the contents of the cyst upon the tendon of the grey horse, formerly sent by Mr. Vincent—we are inclined to think that similar cases have occurred, which have been mistaken for other diseases. We ought to have remarked that the cyst above the knee is lodged among the terminations of the bellies of the flexor muscles, at the place where they give rise to their tendons ; and that of the two cysts below the knee, one is situated at the side rather, between the suspensory ligament and the tendons ; the other behind the flexor tendons, between them and the skin.—EDIT. VET.

IMPORTATION OF FOREIGN CATTLE.

By J. T. HODGSON, M.R.C.V.S.

To the Editor of "The Veterinarian."

Sir,—I BEG leave, through the medium of your Journal, to give a caution to agriculturists against the present mode of examination of the health of imported foreign cattle, as quite useless, as far as regards the security from contagion. I have been many years both in India and the north of Germany (Holstein), where, from difference of climate and agricultural economy, epidemic disease is more common than in the temperate climate, and with the im-

proved agricultural economy of Great Britain. But let it not rest upon my opinion, or any facts I shall bring forward; in the mean time you and others of the profession judge for yourselves; go down to Brewer's Quay—see the filthy state of the hold of a cattle steamer—see the manner in which cattle and sheep are landed and examined; and then say, if it is possible for the examiner to decide, under the circumstances, whether or not any have *fever*. Down goes the sling or basket, and up comes a cow or five sheep, the first with its whole weight dropped on the deck, not on its legs; the second turned heels over head out of the basket, with “Now, doctor, for a true examination; here they are, as lively as kittens.” It would be invidious to comment upon this gentleman, who no doubt obeys his instructions. The exporters are better judges than to send over cattle and sheep in that state of disease, that you might see it by looking them in the face; in fact, the older animals have, most likely, had the fever. The danger is not when they are brought over on deck, but when the young and predisposed animal is brought over in the hold. Your readers need not be told by me that the (Pocken) fever would be sooner produced in this way than by inoculation—that *the fever would appear after having passed the inspector*: and the local affection when at Alresford Fair, Hants, where they have been rubbing their foreign noses over sheep that had to return unsold to large flocks, and for the consequences, I beg leave to refer to *THE VETERINARIAN*, N. S., p. 205, No. 52.

Cases of a similar kind occur in every man's practice. I accidentally saw lungensucht (pulmonary consumption) at Putney Heath in 1837. Lord De Grey had an Alderney cow, in health, till two more were bought, when all became diseased, as it was supposed, from contagion. It was not possible for me to determine this, but I recommended two to be immediately destroyed: one had died. The paddock grass was covered with purulent matter, and, had it been a homestead, I should have cautioned against the danger of contagion. Now, Sir, when a similar case happens in Germany, the farmer receives compensation for a milch cow 90 marks; and, in the event of it happening from contagion under the new tariff, will the British farmer receive compensation from the county-rate or from Parliament? If compensation is not to be allowed, these cattle and sheep should not go further than from the ship to the slaughter-house.

Free trade implies reciprocity in dealing; but how does the case stand? There are no district veterinary surgeons, as in Germany, to seize pocken cattle and sheep that may have the disease, subsequently to inspection at the Custom-house, among 10,000 cattle and sheep at our large fairs and markets. Supposing this

to happen in the West Riding of Yorkshire, and the farmer went to the Members for the Riding with the following bill:—

To advice, journeys, and medicines of Mr. —, my own veterinary surgeon	£25	0	0
To journey and advice of Professor —* of the Vete- rinary College, as per advice of my landlord	25	0	0
To prime cost of 80 dairy cows at £20 each	1600	0	0
<hr/>			
Total loss of cattle destroyed by advice of veteri- narians	£1650	0	0

N.B. Received very politely by the Members; sorrow expressed for my losses; received intimation that the best thing I could do would be to put my own shoulder to the wheel!!!

An intelligent artisan, manufacturer of my last Newmarket corderoys, said he thought he would, in the end, have to pay dear for his cheap foreign spread.

I have not been permanently resident in England; but I appeal to my professional brethren of my own standing, whether or not epidemic disease among cattle and sheep has been less frequent with the improvement in agricultural economy, and whether or not less liberal management would not tend to more frequent occurrence of epidemic disease.

I should be sorry to see any unnecessary restrictions on the supply of food; but in professionally giving advice, we are bound to look to the ultimate result. I will admit the advantages of free trade to the fullest extent of the principles contended for: in practice they have in other instances been found inconvenient, and will be so in this, though the effect may not be immediately produced by diminished profits of the farmer.

As we are to admit preserved meats of whatever curing, 300 quarts of pferde soup (horse soup) à la Hambro', 3 cwt. of pferde steaks (horse steaks) à la Altona, should be imported for the next civic feast. Only fancy, Mr. Editor, you sticking your fork into the rump of Count Kikerabouskie's charger, that broke his leg in the school trying to do the last new polka. It is sold by the executioner! Our comparative anatomy will be in request soon to satisfy the public what they are going to eat!

Your's, obediently.

* This happened in Pinneberg district, in 1841.* I have changed the place and amount, see Continental Veterinary Jurisprudence in my next.

* Mr. Moorcroft many years ago went on a similar journey to the north of England.

MEGRIMS.

By SAMUEL BAKER, *M.R.C.V.S., Chelmsford.*

To the Editor of "The Veterinarian."

Sir,—ON reading a letter in your last publication, by Mr. James Broad, V.S., of Market-street, Paddington, on the subject of Megrims, I wish to offer a few observations, deduced from cases coming directly under my practical knowledge. Mr. Broad seems to think Megrims arises from pressure on the jugular vein from the collar; also he admits the bearing-rein sometimes to be the cause. I have been in practice thirty years, and have taken some little pains to ascertain the cause whence it arises. On examining the horse's eye immediately after or during the attack, I have found it exceedingly convulsed, and acted upon very strongly by spasmodic affection of the muscles; a symptom, in my opinion, that would not have been present if the disease arose from distention of the arterial vessels of the brain. I have never seen a saddle horse affected with this complaint; but all the cases that I have seen have occurred when the sun has been shining bright, or by moonlight, when the snow has been upon the ground.

I will now give you my opinion respecting the cause. I had a very quiet favourite pony of my own subject to megrims. I directed my servant to remove the winkers from the bridle: he did so. The pony became frightened in consequence for a short time, but ultimately did not care about it. I continued driving him without winkers, and he never shewed the slightest symptom of megrims after. It directly occurred to me, that the reflection of the sun upon the winkers, falling directly on the optic nerve, was the cause of this extraordinary complaint. I have had many patients with megrims. I have directly ordered that the winkers be removed, or, if they were not, to have the horse's eyes shaded by a piece of leather three or four inches wide, extending in front from one winker to the other. In every case it has proved successful. I have never seen a case where it did not fully answer the purpose. Lastly, I feel quite satisfied, from the symptoms I have observed of megrims, that the brain cannot be the seat of the disease; for if that were the case, would the horse recover so soon? I may almost say, in some cases, momentarily.

You may rest assured, as I have before stated, that the eye is the part affected; and that the rays of the sun is the cause.

I remain, your's obediently.

P.S. Should you think these remarks worthy of notice, shall feel obliged by your inserting them in your valuable Publication.

ROYAL VETERINARY COLLEGE.

PROFESSOR SEWELL'S CONDUCT TOWARDS A REPORTER FOR
THE PRESS.

To the Editor of "The Veterinarian."

I AM surprised at the statement contained in your Journal of last month. When the Crown so far recognizes the press as to retain a person in the capacity of court newsman attached to the palace—when the Parliament waves the prerogative of which the legislature has always been severely jealous in favour of the shorthand writers for the newspapers—and when in Courts of Justice accommodation is provided for the reporters of the different journals, it might be thought Mr. Teuten, as a member of a recognized body, had a legitimate claim to respect. If on the score of his profession, however, he had no claim as an individual, he must have been entitled to the civility which ought to regulate the actions of men in the ordinary transactions of life. Unless the narrative given of his expulsion be false—and it is so attested that it bears the character of truth—the proceeding is an insult to the public affecting established rights and recognised usages; and will you pardon me if, on so serious a subject, I endeavour to ascertain why the outrage was committed?

The Journal, as the representative of which Mr. Teuten appeared, is not notorious for its slanders or famed for its scurrility. It has never been convicted of libel; nor am I aware that it has ever closed its pages against those who supposed they had any injury to complain of. It is fairly conducted; and as a public organ has forfeited no right that appertains to the body of which it is a member. Of THE VETERINARIAN as a journal there could exist no reasonable cause for fear; but, as the organ of the profession to which the College belonged, it might advance substantial claims, such as could not be impugned or negatived. Most important is it that the public should be informed of the proceedings of those gentlemen to whom the responsibilities of education are confided; and most essential is it that, in your capacity of Editor, you should be acquainted with every fact on which there is a possibility of your being hereafter called upon to comment.

I cannot conceive that Mr. Sewell will be able to justify his conduct. Neither on the occasion of the address, the place where it was to be pronounced, nor the position of the gentleman who was to deliver it, can I find any reason palliative of his behaviour. To the opening lecture of a session the invitation is considered general, and the doors are then free to all who may please to enter. The custom is established, and of it I have frequently availed myself: therefore I am unable to suppose the peculiarity of the occa-

sion can afford any ground of excuse. A college is not a private school; it has a public duty to discharge, and, asking for special respect, it is properly deprived of those particular seclusions that individuals may maintain. Aspiring to honours, it courts notoriety, and, doing so, it virtually resigns its right to guard itself from observation. He who, holding authority under an institution of that kind, is styled a Professor, and undertakes to preside over the education of not mere boys, but young men, and has a high office and heavy obligations to fulfil. The responsibilities of his station are the greater, when, connected with a branch of the medical profession, he is appointed to fit his pupils to apply principles, and to qualify them to deal with the interests of the public. If his teaching be erroneous, the consequences cannot be light, and therefore the necessity that he should not be exempted from inspection. Young men who come to hear and learn cannot be imagined to constitute a class qualified to weigh doctrines or to decide upon opinions; they are not fitted to judge, but need to be protected against their judgments being abused. In the eagerness for knowledge fallacy is too greedily accepted, and the generosity of youth naturally exposes the student to many dangers. Mostly young, seldom highly educated, and generally from the country, the veterinary pupil requires more than ordinary protection against the possibility of his mind being abused through the incapacity or hardihood of his instructors. He is sent from the school to practise upon the property of the farmer, who is not usually so wealthy as to be able to bear the consequences of his ignorance. Himself poor, the veterinary student has not the means to acquire those aids which the sons of the affluent can procure; so, for the most part, he is necessitated to depend on the information he derives from his teacher. The period of study being short, he has not the same leisure for investigation; and, his circle being circumscribed, he does not enjoy those advantages of communication which the members of the human medical colleges possess. In every respect the veterinary student has special claims on public consideration, and these can only be enforced through the medium of publicity. If secrecy and exclusion are to be arbitrarily asserted and authoritatively maintained, the College becomes removed from every check, and protected from every limitation. The young gentlemen who enter it, seduced to do so by a name which is warranted by no character such as it implies, are virtually given up to the ignorance or caprice of those who, under fictitious titles, may conceal failings and vices of the worst description.

In the case of the teachers at the Saint Pancras Institution, all those reasons which, upon the professors of other colleges have a

general application, gain a particular force. The gentleman who is there appointed to instruct is not selected for such a situation because of his reputation, nor chosen on account of his ability. He is subjected to no examination, exposed to no test. He has as a teacher no trial to undergo, and no station to maintain. He is thrust into the school, and he is obliged to lecture merely to save the pocket of the management. His security in the situation depends solely upon his pleasing the subscribers who send their animals to the infirmary; and, therefore, it is not surprising if, in the lectures, "tact of practice" is often dwelt upon with emphasis, and soundness of principle sometimes sneered at as a delusion. No report is made of what is taught. No minute is kept of the proceedings. The teacher is left without supervision, and free from the slightest sense of control. He may inculcate what he chooses, and assert what he likes, for he is exposed to no authority. The Governors view the school only as means of payment for the practitioners whom the nature of the Institution obliges them to employ. The class may murmur; the pupils may be dissatisfied; the teaching may be false; and the teacher may be incapable; but therefore no change would result. The man who can manage to mumble for a time—though he has but the previous hour feebly endeavoured to learn the lesson he then presumes to teach, and in every sentence he utters is guilty of an error—may, nevertheless, continue to bear the title of "Professor," and, to the world, appear as the Master of the veterinary art!

Consequently, even if the Professors at Colleges had not been liable to publicity, the teachers at the Saint Pancras Institution should be subjected to it. It can, under the circumstances, afford the only security to the interest by which the place is supported. It can, to the parents and friends of the young men who pay to be instructed, give the only assurance that the purpose is observed. It can, to the public offer the only certainty that those emanating from a so-styled College are worthy of the confidence which their word is calculated to create. Without such security, assurance, and certainty, the place may be courteously termed a "College," and politely recognised as a "School;" but there is too great a possibility of its being an obstacle to the advancement of our profession, a means of deception upon a class, and a source of imposition upon the public. All and every one directly or remotely concerned in the progress of veterinary science must, therefore, deeply feel the arrogance which refused to submit to opinion, and by the act confessed a fear which honourable natures would disown.

For the talent, the propriety, or the moral conduct of those connected with the Saint Pancras School, publicity in the only safe-

guard ; and as this in its fullest sense would still be imperfect, the fact that it is altogether withheld becomes of the graver import. The want of civility which accompanied the denial makes the circumstance the more strange. Why should Mr. Sewell repel him whom public men invite, or resent as an insult an offer which other persons can esteem to be a compliment ? Are the Professors too modest to wish for fame, and too sensitive to sigh for notoriety ? Paid paragraphs, special reports, unusual invitation to literary friends, and false titles in needless publications, do not countenance any such conjecture. I cannot recollect when one of them has shrunk from the certainty of puff ; or frowned to see his name encircled by a confusion of printed panegyric. The disposition of the men, consequently, does not explain an affair which, on the contrary, it renders more extraordinary. The circumstance altogether is so peculiar, that to interpret it I am obliged to refer to those motives which willingly I would not allude to.

The Professors, some of your readers may not be aware, have their own publication. To enrich this, Mr. Sewell's opening lecture was reserved. It was not to be reported by one who would represent it accurately. The matter was to be compressed, arranged, corrected, supervised, and edited, before it was to be given to the world, The sentences were to be connected, and the language to be amended to fit it for the public eye. Opinions were to be suppressed, and passages were to be introduced ; this struck out, and that put in ; and various alterations made to give an aspect of consistency, and a shew of sense, before criticism was allowed to see it. Not what was said, but that which might or ought to have been said, was to give the vulgar a notion of the instruction provided at the Veterinary College ! Mr. Morton was to read and revise, to improve and adorn the Lecture, which in a new dress was to come forth as pleasant reading for select subscribers !

Now, Sir, putting all professional considerations out of the question, as one of the public I protest against this mode of proceeding. I want to know what is done ; and I cannot accept any man's report of his own actions, especially when that man exhibits a strong aversion to allow any other and more impartial testimony to be given. The dressed-up account of a certain speech, published after the lapse of months, and under the sanction of the speaker's interested partizans, for a particular object and in an exclusive journal, I cannot view as a fair report, or one which can be supposed to be fairly reported. Every principle of candour or honesty arms the mind against regarding any thing of the kind in any other light than a deliberate imposition ; and when, in order to secure the means of practising it, rudeness is resorted to,

and resentment defied, it becomes impossible to imagine there does not exist the strongest reasons for its exhibition.

The Professors may have ample cause to dread publicity, and shrink from truth ; but they are not superior to rights, independent of usages, or free from obligations ; and by the impression which their conduct must create, and the corroboration it affords to accusations they lie under, the punishment they deserve will surely be accelerated.

I remain, &c.

EDW. MAYHEW.

16, Spring-street, Westbourne-terrace.

VETERINARY JURISPRUDENCE.

NEWRY OCTOBER SESSIONS.

AT the Newry October Sessions, the Assistant-Barrister (Jones) having disposed of all the civil bills before him, tried the following horse case, which excited considerable interest in the town and neighbourhood of Newry :—

Nicholson v. Tweedy.

Cause of action, damage sustained by a breach of warranty as to soundness of a horse.

George Craig, plaintiff's servant, examined.—A bay horse was bought by my master in Banbridge fair of June last from the defendant, John Tweedy, at £37 10s.; was warranted sound; brought the horse home next day; on the day following observed a hole in the toe of the near fore foot; shewed it to my master, and afterwards to a blacksmith, who is since dead; in a few days took the horse to Belfast by my master's order, and had him examined by Mr. King; had him also examined in Downpatrick by Mr. Hodges; observed the near fore foot, that he could not step out or trot on it like the other; he got lame on the road, and when at rest in the stable he pointed the foot; served the defendant with notice of sale on the 27th June; the horse was sold by auction on the 3d July, and was bought by defendant for £21 10s.

Cross-examined.—Has been a year and a half in his present employ; brought the horse home from Mr. Ferguson's, near Banbridge, the day after the fair; got home about 12 o'clock; did not

abuse the horse on the road, nor put him off a walk ; the horse had been in a stand with another horse the night previous ; Ferguson's man said nothing about his having got into the manger ; took him to Belfast on the 19th ; after a journey to Lurgan, the horse came home with a shoe loose on the near fore foot ; had the shoe removed and re-applied at the smith's shop ; his master was not satisfied with King's opinion, and sent him all the way to Downpatrick to Dr. Hodges on the very next day, when the horse came home ; and, on the day of the auction, he was in as good condition and appearance as on the day he was bought.

By the Court.—Observed the hole in his foot the day after he brought him home ; it was so plain, that any one could see it.

Cross-examined.—The same shoe was again applied ; did not ride the horse without a shoe.

David M'Carten examined.—Is in Mr. Nicholson's employment ; saw the horse the Monday after Banbridge fair ; saw the hole in his foot ; knows that Mr. Nicholson is not a judge of a horse ; the hole was in the place where horses are usually bled in the foot ; the horse was in good condition when sold by auction—if any thing, too fat.

Mr. Hodges, Veterinary Surgeon, examined.—The horse was brought to me for examination on the 21st June ; was unsound, being lame in the near fore foot and off hock ; took the shoe off, and found the cause of lameness to be contraction of the hoof ; it appeared to him that he had been bled in that foot ; the effect of a loose shoe would be to give ease to the foot.

Cross-examined.—Saw the hole in the foot before the shoe was taken off ; there was no tenderness about it ; the part was cicatrized ; could not say the hole did any harm to the foot ; tried it with the pincers all round ; he did not flinch, except at the centre, opposite the toe of the frog ; contraction is the consequence of all chronic diseases of the foot ; in this case the contraction was mostly of the inner quarter ; it is not possible to cure the disease.

By the Court.—Measured the feet ; found the near one considerably less than the off ; the disease might have existed three months, or, perhaps, twelve ; the hole in the foot was the mark of the operation of bleeding, which must, of necessity, have been performed for some disease.

For the Defence.

Mr. King examined.—Is a veterinary surgeon, in business in Belfast ; recollects examining a bay horse in Banbridge fair, by request of Mr. Tweedy, and afterwards in Belfast, by request of

Mr. Nicholson ; ten days or a fortnight elapsed between the examinations ; in Banbridge he considered him perfectly sound ; when in Belfast, he was unsound from acute founder in both fore feet ; the horse was much altered in appearance, and so abused that he scarcely knew him ; founder can be brought on in a very short time, and is caused by over-feeding or over-exertion.

Cross-examined.—Examined the horse for the plaintiff on the 19th June, and gave a certificate ; did not say any thing about the founder, but condemned him for a bone spavin in the off hock ; certificate read ;—spavin is generally of some time standing before it is observed ; the young man did not ask him to take the shoes off ; did not think it necessary, as he was instructed by Mr. Nicholson to have the horse shod if he passed sound ; Mr. Grogan, a friend of Nicholson, was present at the examination ; the reason he did not mention the founder in his certificate he explained, in a private letter to the plaintiff, to be that he could not have good ground of action against the defendant on account of the founder, as he considered it of recent occurrence, and recommended him to have the matter settled by arbitration.

By the Court.—Did not see the hole in the foot.

Mr. Byrne examined.—Is a veterinary surgeon, in practice in Belfast ; has been in business there about six years, and keeps a yard for the sale of horses ; this horse stood in his establishment for sale at the time of the June fair of Belfast, and which was a few days before the Banbridge fair ; had a notion of buying the horse himself, and offered Tweedy £32 for him ; he looked at him frequently during the day, and saw him trot ; would not buy him at any price if he did not consider him sound ; saw the same horse subsequently in Lisburn fair of July ; he was submitted for professional examination, and considered him then a sound horse ; took off his shoes, and tried him for corns ; he had no appearance of a hole in his foot ; was told that he was then in dispute, and examined him minutely ; there was no appearance of any disease whatever.

Cross-examined.—The horse had no appearance of bone spavin in any of his hocks ; spavins in horses generally get worse if not put under treatment ; heard Mr. King's evidence about the spavins ; every man is entitled to his own opinion ; his yard in Belfast is not covered with straw, but is hard and composed of cinders.

By the Court.—Did not measure the foot, nor try it with the pincers as did Mr. Hodges ; it is not usual to take the pincers in examining a horse's foot that does not shew lameness.

William Moffet examined.—Is a horse-shoer ; shod this horse

for six months; never saw any thing wrong with his foot; never saw a hole in either of his feet; never knew him lame.

Cross-examined.—Shod him two weeks before the Ban fair; he was the property of Mr. Martin, of Ballinahinch, who sold him to Tweedy the defendant; Tweedy is not a regular horse jockey; knows that this is the same horse; he is a brown horse; saw him at Tweedy's stables; Martin's brother took him to Tweedy's house.

Re-examined.—Saw the horse to-day in Tweedy's possession; he never was corned [*a shoe produced*]; it is not the same that he made and applied before the Ban fair.

Defendant's servant examined.—Saw the horse the day he was auctioned; his condition was very much changed; was quite dry in his hair, and did not look half as good a horse as when defendant sold him; Tweedy is not a horse-dealer; he makes his money by farming.

Cross-examined.—The horse never was returned on Tweedy before, nor since; was never sold since plaintiff returned him; defendant has him yet, and he is at the court door to give evidence [*great laughter*]; he was in last Lisburn fair, and was shewn to Mr. Byrne, but was not sold.

William M'Cormack examined.—Is a pretty fair judge of a horse; knew this horse; saw him before he was sold in Banbridge fair; never saw any thing wrong with him; saw him on Saturday, and again to-day, and is of opinion that he is as sound a horse as any he ever saw.

Cross-examined.—Isn't a veterinary; doesn't take it on him.

This concluded the case; and, after some observations on the evidence, the learned Barrister gave a decree for the plaintiff for £20.

Solicitors for the plaintiff, Messrs. Frazer and Smyth; for the defendant, Messrs. M'Clelland and Crawley.

Armagh Sporting Chronicle.

— —

* * Mr. Small will accept our thanks. Will he, when next he may favour us, have the kindness to address his letter *direct* to our printers?—ED. VET.

Home Extracts.

A NEW METHOD SUGGESTED FOR THE RESTORATION OF ANIMAL HEAT IN THE COLLAPSE STAGE OF CHOLERA.

By Mr. JAMES TURNER, Veterinary Surgeon, London.

I AM impressed with the belief that an agent I am about to propose in the treatment of spasmodic cholera is capable of imparting instantaneously not only the requisite amount of caloric, but also an additional *vital principle* in association with it. Instead of enveloping the body of the patient in flannel, I would have a sheep slaughtered close to his residence, and the whole skin of the animal by its flesh side, while reeking, applied to the bare skin over the entire trunk and lower extremities of the cholera patient.

I may be permitted here to state, that upon horses this is the only known therapeutic agent which we possess as a sudorific; but so potent is it in operation, that the result may be compared to a race-horse's sweat in body-clothes preparing for a sweepstakes:—first, it imparts its own animal heat; secondly, by its weight and close adaptation to all the convexities and concavities, it adheres most tenaciously, aided in this particular by the retention of some contractile quality; thirdly, it is a counter-irritant, and will occasionally vesicate or loosen the hair.

As a *renovator*, in those cases of prostration of the vital powers where the dark colour and thick consistence of the blood indicate the abstraction of its vitality, the curative power of this remedy has been times and oft thrust upon my notice, when applied to the exhausted or overdone hunter. Horses which have been left for dead in the field from the severity of the chase, which had lost the power of standing and of locomotion, and were obliged to be dragged on a gate to the nearest stable, when one or more fresh-flayed skins have been applied throughout the spinal region, from the poll to the tail, by the following morning have been able to walk round their loose box without support.

In theorizing upon the *modus operandi* of this agent, I claim for it a much higher power than that of conveying a high temperature, and maintaining it for a lengthened period.

Transfusion of blood into the veins has been wisely proposed for Asiatic cholera; my suggestion is an approach to it, without having to encounter the prejudices of so formidable a proceeding. The pores of the human skin, by the transmission of heat and

moisture, will open and imbibe the *halitus*, or serous vapour evolved from the recently slaughtered skin; and this will be retained, owing to the close approximation or adhesion which will be found to exist between the two skins.

Cases of *suspended animation* from drowning, &c. should be similarly treated.

Regent-street, October 31, 1848.

The Lancet.

LONDON FARMERS' CLUB.

THE discussions of this Club were resumed, after the usual interval of the vacation, on Monday the 6th instant, in the Club Rooms, Bridge-street, Blackfriars. The chair was taken by Mr. Shaw.

The subject set down for discussion on the card had reference to the fattening of animals with grain. It was to have been introduced by Mr. R. Baker, of Writtle; but, in consequence of that gentleman's illness, a lecture by Mr. Cherry, V.S., on "Pleuro Pneumonia" was substituted, as will be seen from the following opening address of the chairman.

The CHAIRMAN said—Gentlemen, the subject which was regularly appointed for this evening is one, I think, possessing as much interest for you as, perhaps, any which could have been submitted to you. It is a matter of great regret that, owing to illness, our friend, Mr. Baker, is not enabled to be here to introduce the subject on the card, viz., "The best and most economical application of grain to fattening animals, and its comparative value with oil-cake, linseed, and other substances used for feeding purposes." However, as from the cause which I have mentioned, we are not able to enter this evening upon that subject, the committee of the Club, through the kindness of Mr. Cherry, will be enabled to submit to you a lecture on a subject which I need hardly say is next in importance to that to which I have adverted; for if it be important to know how to feed the animal, it must also be important to know how to rear it and keep it in health. Unfortunately, the disease upon which Mr. Cherry has undertaken to lecture this evening, viz., pleuro-pneumonia in cattle, is so insidious, and, at the same time, of so fatal a character, that it baffles the best exertions and the highest talents, and renders comparatively useless the application of those articles which we should have considered in dealing with the other question which I have mentioned. I am therefore convinced that you will all admit this subject to be an important one; and I avail myself of this early opportunity of

saying how much we feel indebted to Mr. Cherry for his kindness in coming forward on this emergency.

Mr. CHERRY said—In proceeding to address you in reference to a disease so devastating as that to which the name of "Pleuro Pneumonia" has been given, I cannot but feel that this may appear presumptuous, when so many talented men have failed to bring forward a remedy whereby the ravages of this disorder may be mitigated; and I feel this the more strongly, on account of having been called upon to address you at so short a notice. In the month of April last, owing to circumstances which had occurred in the previous September, I felt bound to tender my services to the Club in relation to this particular question; but several months having elapsed without my hearing any thing more of the matter, I concluded that it had dropped, and much of the matter which I had intended to lay before you was employed by me in other ways. Having been called upon, however, by Mr. Corbet, with a view to my introducing this subject, I will now do my best to point out those things which I think essential to a right understanding of this question. In the first place, we must regard it as a political question, involving the well-being of a large portion of the community; not merely affecting those who rear, and endeavour to derive profit from rearing, animals, but also affecting the community at large as regards the supply of food; for if a disease of this kind cannot be arrested, not only will there be loss to the individual who is engaged in the rearing of animals, but to the public, who will, in consequence, have injurious food placed before them. Now this disease, though it is called pleuro pneumonia, is only part and parcel of a more general one, and it ought, in fact, still to go under the name "epidemic," which was originally given to it. The disease first broke out in the year 1835; that was the first notice we had of the malady: but it was not till 1840 that it manifested itself among cattle and sheep. Up to that time it had been confined to mankind and to horses. It then went on in its career, and within a year or two after its appearance, a type of the disease, which has since been called pleuro-pneumonia, became prevalent; the disease being principally confined, in that peculiar form of it, to cattle, and not being much spread amongst other animals. But still, if you examine, you will find that the various forms of the disease are all more or less connected with each other: though it may happen that one organ will be more particularly the seat of the disease than another, and though different animals may be differently affected, still the same causes produce these apparently opposite effects, and therefore we must consider these different forms as part and parcel of the same disease.

The attempt has been made for a long period to discover a me-

dicine which shall cure this disease. Now, I am convinced that the effort has been made in the wrong direction—that we have looked too much at the means of cure instead of the means of prevention—and that this is the reason why we have failed to discover a remedy.

There are various things to be taken into account in dealing with this important question. We must inquire how far breeding has any thing to do with the disease;—how far locality and feeding have a bearing upon it. These are things which have a very great influence on the progress of the disease; and it is in this direction, I think, that we shall ultimately find remedial measures. The disease broke out in 1840 amongst our domestic animals. I now exclude horses from my consideration, and confine myself to animals which are reared as stock. The disease then shewed forms of a low fever type, and it spread very rapidly through the kingdom, though it came on apparently with so much suddenness. If attention had been paid to the subject at the time, it would have been perceived that the disease was long lurking in the animal—that there had been oftentimes premonitory symptoms for months. It is to these premonitory symptoms that attention should in future chiefly be directed; for, when the disease had arrived at that stage in which it is frequently found in its more virulent forms, nature has not sufficient power remaining to throw off the malady. The disease is, in itself, a form of low fever, accompanied by depression of all the vital energies. In the first onset there is no particular organ which is the seat of the disease. There seems to be, as it were, a want of vitality in the whole of the component parts of the body. Thus, the disease will go on for an indefinite period, sometimes longer and sometimes shorter, until it attacks some particular organ. But I never saw any one form of the disease coexisting with another form.

Then, another question of very serious importance is—How far such diseases are hereditary, or rather how far predisposition to them is so? If an animal is born of diseased parents, you find the disease sometimes existing at the period of birth, but generally the disease is not found to exist at so early a period. In this respect it varies in different species: sometimes an animal will go on well until maturity, when the disease will be manifested in a virulent form. There have latterly been a great number of cases of this kind. There has been a predisposition derived from the parents who were in a state of disease; and at last some accidental cause has come into operation, and produced that form of disease which is called *pleuro-pneumonia*; but still, in all such instances, what we witness is the result, and not the disease itself. In the next place, it is a very important inquiry—How far breeding in-and-in

affects this question? It has, I think, a good deal to do with the disease; for although it may appear that by crossing with a superior animal you will produce an animal of a superior shape, yet the first point to be considered is not the shape but the animal life; the form is but a secondary matter. I think this is borne out, in some measure, by the fact of the disease having gone on so long, and at a period when our flocks and herds were, in the main, arriving at a much greater approach to perfection than they had ever attained before. It is, indeed, true that our highest breeds, taking them altogether, have been most free from the disease; but this is accounted for by the fact that more care has been taken of them, that they have been kept in greater comfort. This has, in a great measure, counteracted the debilitating causes which have operated in other cases. If an animal were left in the state of nature, where there was a wide range for it to roam over, you would invariably find that in cold or wet weather it would seek some sheltered spot; but an animal which is confined by hedges and fences cannot do this, and consequently is placed in an inferior position. Moreover, there is a disposition in animals to seek for different kinds of food at different periods: at one period you will find them disposed to crop trees, whereas at another they will not touch them. Diseases of an epidemic character are more prevalent in wet and marshy situations than in dry ones. You do not find the same amount of disease on high and dry lands as you do on low and marshy lands, and this difference arises from the fact that animals cannot bear wet and cold. The question of breeding in-and-in is one of great importance. Nature herself clearly points out that such a system ought not to be carried out to any great extent; for if we look at things as they are, we shall scarcely ever find animals of the same family procreating together: generally speaking, they separate, and in fact they have, except in a state of confinement, a repugnance towards each other.

With regard to the condition of the animal in a diseased state, it is one of low fever, a want of animal life. The question to be considered is, how this is brought on; whether by the peculiar state of the atmosphere, over which we have no control, and which we cannot properly understand, or by other causes over which we may exercise control. In the first instance, I was induced to believe that it was communicated through the air; but in what way I felt that it was impossible to determine. In many instances, the food on which the animals had to live has been blighted to a great extent. I have seen the blight extending for miles together. It is probable that the two causes went on operating at the same time; in other words, that there was a predisposition in the animal, arising from causes which existed in the atmosphere; while this

predisposition was aggravated by the blighted condition of the food on which the animal subsisted. The disease will remain, for a long period, as it were in a quiescent state. Thus we find that the ox, for example, though it has not been suspected of having any disease, if slaughtered, will sometimes exhibit strong traces of that peculiar deposit which is one of the most striking characteristics of the disease. We find the skin often partaking of the disease in a peculiar manner; and so attack after attack is made, until finally there is a general break up of nature. The attempt to get any thing like an universal remedy to meet so universal a disease must, I think, be in vain. Nature has given us a very large laboratory wherein to choose; and she would not have given us so large a laboratory, if she had not intended that every type of disease should have its appropriate remedy. What is curative in one stage of disease is deleterious in another; hence we must not expect to find any remedy which will be universally salutary in its effects. But if we give greater comfort to the animal—if we remove it to some place where it will not be subject to deleterious influences, by pursuing such a course, we shall go far towards the removal of the malady.

Looking at the Continent, we find that a disease of a similar character had existed there for a long period, and had, in fact, become hereditary. Now, we know very well that there the same amount of attention has not usually been paid to animals as has been given to them in this kingdom. The result has been that the disease has gone on increasing from year to year, until, at last, it has become a positively recognised disease, existing as a matter of course; and if we go on in the same way as we have done for some years past, it will, I fear, become the same in this country. That the disease is in itself contagious I cannot for a moment believe; but that the malaria thrown off from a diseased animal may have the effect of producing disease in another animal is, I think, not to be denied. If you take an animal, and place it in a stall-shed, that animal, if in perfect health, will resist for a long period the influences of bad atmosphere; but if it have the predisposing causes, it will soon acquire a similar disease to that of the animals in its neighbourhood. We find that a number of animals placed in the same shed are generally attacked in the same manner: this disease will run rapidly through the whole of them; but no one has ever been able to shew that the several animals attacked were previously in good health, and, I believe, it will generally be found that the disease has existed for a long period before being manifested. I have often been able to trace disease in an animal before he arrived at that state in which the disease is easily recognised. A process of emaciation going on in the animals

affected, they do not arrive at that state of fatness and maturity which they would otherwise attain; while, on the other hand, though there may be great organic disease, so that the lungs on one side cannot perform their proper functions, still, the disease being rendered inert, the animal will go on getting fat. But unless such a condition be produced, it is in vain to attempt to get the animal into the right state. In the one case, you have the disease in a state of quiescence; in the other, in a state of organic operation. There is one thing which will, I think, tend greatly to the prevention of the disease, and that is, the placing animals where they will have increased warmth during the cold winter weather, driving them, for instance, at night into the yard; and though, in such a position, they will not get so much food as they would elsewhere, yet, from not being exposed to the chilliness of the night air, they will thrive better during the day in an open situation, on a small quantity of food, than they would if they were exposed, and in that situation consumed a larger quantity of food in the night. Generally speaking, indeed, animals do not feed in the night; you find them then, for the most part, lying down, and not occupied in consuming food. We know that the saving of manure is a matter of the greatest consequence; but it is a question worthy of consideration how far it is conducive to health to have the manure in the centre of the homestead, with all the doors open. I think that if, instead of having doors opening into the yard, you had the paths to the stables and buildings outside, the result would be such as to justify the alteration. Animals which are well tended are in a great degree free from the disease, and are much less frequently attacked with it than those which are exposed. We find invariably that, the more animals are exposed, the more they suffer from a visitation of this kind, the disease being the worst in low wet situations.

Age seems to have no influence with regard to this disease, for you find it attacking all animals, at all periods. Some very remarkable instances of the effects of the disease have come under my observation. I will mention one very curious instance of a flock of sheep which I knew very well, a portion of which were struck in one night when a month gone with lamb. None of the sheep attacked cast their lambs, but at the proper period for yearning they brought forth embryos, the dead portions having remained in the womb. The disease, like other hereditary maladies, will pass over one or even two generations, and shew itself in the third. It is in this way that the disease has progressed and is still progressing; and unless means be speedily taken to effect an alteration, it will, I fear, become hereditary. By care and attention, by selecting animals of the best form and the healthiest character, by avoid-

ing, as much as possible, breeding in-and-in, and by procuring stocks from those which have been the least exposed to the ravages of the malady, the disease may be, in a great degree, removed. If animals had a greater degree of comfort, and were free from the action of cold and wet, I am satisfied that in the course of a few generations the disease, if it would not have ceased altogether, would have very much diminished in degree. I believe we may consider that singular deposit which is found in the lungs of the animal as arising from a want of power in the lungs. This may lie there dormant until an exciting cause has arisen, and when suppuration takes place an abscess is formed; but we very often find the disease existing in its original form.

Again, in the case of the skin, we find that the hair becomes rough, and, as it were, dead; that patches of hair come off, blisters arise on the surface, and that the irritated state of the skin is accompanied with emaciation. In such cases it is vain to apply external remedies, for by so doing you only aggravate the disease, this disease invariably depending on the febrile condition of the whole system. There is another form of disease which reflection leads me to regard as epidemic, and as arising from the same causes as that under consideration: I refer to the disease to which is given the name of small-pox. All the cases which I have been able to trace have arisen under circumstances similar to those in which you find pleuro-pneumonia rife in cattle. We do not find the peculiar type of pleuro-pneumonia in cattle existing very much amongst sheep; they seem less prone to be affected by this particular form of disease. Why this should be so I can hardly tell you, but such is certainly the fact. Sheep seem more prone to affections of the skin, and to a general wasting of the body, than to disease of the lungs. In the case of cattle, as you are aware, it is the lungs which are peculiarly affected; in sheep it is the general organs of the body and the skin which are attacked. If you expose a sheep to wet and cold, you find that the skin becomes affected as an inevitable consequence. I have no doubt whatever that the maladies are kindred ones, arising from the same general condition of the system.

Looking, then, at the subject in these different points of view, it would be useless, in the case of a disease arising from such a variety of causes, to prescribe any universal mode of treatment. The treatment which would be right in a low and damp situation, would not do in a high and dry one; and hence the treatment should always be regulated in a great degree by the particular nature of the locality. With regard to treatment generally, it is of so complicated a matter, requires so much watching of the operation of the remedies, that I should not be honest if I were to advise you

to take the matter into your own hands: I am persuaded that you would thus, in the majority of cases, do more harm than good. But with regard to the other means—the means of prevention—those do come within your province, and may, if properly applied, not only mitigate the disease in the animals attacked, but in a great many cases actually save animals from its influence.

With respect to food, I would observe that that which is grown in low and wet situations is apt to produce disease of a similar character to that which I have described, and it is, of course, necessary that warmth should be more attended to in such situations than in high and dry ones: and I have very little doubt, that after such a summer as we have had this year, after so much rain has fallen, and with the prospect of a cold harsh winter, the disease will be more prevalent even than it has been, and you must look forward to greater losses than you have hitherto sustained. I would therefore suggest a resort to sheltering, as much as possible, as a means of preventing the ravages of the disease. It would be infinitely better to seek the assistance of one who has been in the habit of attending to the disease, than to go on tampering with it without the proper means. Long experience has convinced me that a great many more animals are lost by an indiscriminate resort to the drug-shop than from the natural operation of disease itself. Every druggist has a nostrum for all the diseases to which all the animals in his neighbourhood are subject. It very frequently happens, however, that this nostrum given is a poison in direct opposition to the real wants of the animal. When an animal has suffered in lambing or foaling, it is by no means uncommon to pour burning matter into the excoriated parts: this is done with the idea of giving relief. The question with regard to such treatment is, not how many animals live under it, but how many die under it. It is always bad to tamper in such cases. In the great bulk of instances it will be found that if proper attention were paid to the condition of the animal—if, when an animal was found looking rough in his coat, or beginning to loiter and keep away from his companions, it were at once concluded that something was wrong, and the animal was at once taken away from the rest, sheltered, and nourished, he might in the course of a few days return in comparative health. It is vain, however, to leave these things to the shepherd or the herdsman: from this cause it is that the disease has been propagated, and has gone on until it has reached the present point. An eye a little more interested and quicker than that of a servant is required to carry out what is needed.

As a matter of course, the greatest amount of disease will be found to exist at those two periods of the year when the greatest

change takes place in the animal, viz. the spring and the autumn. During the middle of the winter an animal is much less susceptible to disease than during the warm and muggy months of the latter autumn; for at that period of the year they are shedding their coats, and preparing for the change of season; and of course, when there is the greatest liability to disease, there should also be the greatest attention to the comfort and general condition of the animal. A change of food is frequently requisite: as soon as animals have become tired of one form of food, another should be given to them.

The question is altogether one of too much importance to be disposed of in a summary manner, or in a single lecture; but I trust that I have started some points which may hereafter be taken up with advantage. I have before remarked, that we must not attempt to remove by any particular treatment a disease so widely spread; it is only by carrying out a general plan that we can hope to arrest it.

A Member here asked whether it had occurred to the speaker to make any observations with regard to the unwholesomeness of diseased cattle as human food.

Mr. CHERRY, in reply to that question, would observe that, in the advanced stages of the disease, cattle become unwholesome as food, inasmuch as they do not possess the full quantity of nutritious matter. The meat had lost its redness of colour; in fact, lost its general character: it was soft, tasteless, and flabby, not having the taste of meat.

Mr. F. HOBBS.—As a member of the committee, I feel much indebted to Mr. Cherry for having come forward to introduce the subject of pleuro-pneumonia; and I feel persuaded that the members of the Club present on this occasion entertain a similar feeling. I quite agree with Mr. Cherry, that the subject of pleuro-pneumonia is one of vast importance to the country at large; it being now generally admitted that more animals die from this disease alone than are imported into the country under the tariff. I do not believe that any of us pay that attention which we ought to pay to keeping our animals warm during the autumn and winter months, particularly at this period of the year. We seem rather inclined to allow them to remain upon low, marshy, and swampy land—I suppose, because there is a little feeding going on there—than to remove them to drier land, and there give them a little food from which they would derive greater benefit. I quite concur in the remark of Mr. Cherry on that subject. It is my firm belief that the more attention we pay to the warmth of our animals, and to the adoption of improved methods of constructing farm buildings, the less food animals will consume, while, at the same time, they

will flourish much more than they do under the present imperfect mode of management.

Mr. THO. TURNER, of Croydon.—Mr. Cherry has stated that he conceives pleuro-pneumonia to be a fever of a low typhoid character. I think he is right in that view; and I think that, when you all attend more to the comfort of your animals in the manner recommended by him, you will find your account in it. Supposing he is right in thinking that these animals are all struck with a low typhoid form of fever, then the depletive remedy is, of course, always inadmissible. But I take it that many animals are struck, while in full health, with a different form of disease, attended with disturbed breathing; and in such cases I think you would be doing right by applying the depletive remedy. When animals exhibit premonitory symptoms of an inflammatory nature—for instance, sore throat—the depletive remedy, as a counter-irritant, would be of very essential service; it might actually prevent the malady from travelling down from the throat into the bronchia and the important structure of the lungs. I keep a little stock of my own, to which I attend myself. I watch the animals very closely; and I am satisfied that there are premonitory symptoms which should be met by the attentive principal, and not by the meddling servant; and when the attentive principal discovers that he has got an animal in that condition, he will call in the scientific man, instead of depending upon the herdsman, or upon the quack, or upon the nostrum that destroys; he will, in short, call in the aid of the first veterinary surgeon in the locality. Now I agree with Mr. Cherry that we have gone on too long breeding in-and-in, and I also agree with him that low damp soils and improper food tend to increase the mischief; but still I maintain that in some instances the disease, instead of being of a low, is of an inflammatory character, and it should then be met by the remedies usually resorted to in such cases; and, while you are adding to the comfort of animals, do not lose sight of ventilation. Give them, also, a right aspect; do not let them have a north-easter, but let them have a dry atmosphere, the wind proceeding from the right quarter. I should only fatigue you by going more fully into the subject, but I cannot too strongly impress upon you the necessity of attending to the earliest symptoms of the disease. There are certain noises which animals make at its commencement, and it is then that judicious treatment is most valuable; it should then be left to the acumen of the scientific man to determine whether the animal should be medicined, or whether it should be left to the *vis medicatrix naturæ*. In conclusion, I would observe that it is a matter of moment, when animals have been struck with disease, that they should be removed, if possible, to another locality, and placed in another situation.

Mr. CHERRY.—I quite concur in the remarks of Mr. Turner as to the general treatment of animals. I did not attempt, in my short address, to go into those questions which are generally understood; my object was to draw attention to those points which I conceived had not hitherto received sufficient attention. There may be cases of so aggravated a nature that bleeding is absolutely requisite; but I have endeavoured to generalise, looking at the average condition, and not the particular instance. With regard to the removal of the animal from an unhealthy locality, I think the desirableness of such removal is too generally admitted to require any comment.

Mr. FIELD.—Being possessed of a little land, with a few cattle upon it, perhaps I may be allowed to make a few remarks on this subject. I certainly have found counter-irritants of great benefit when applied to the chest, and to other parts of the animal; and as regards removal, whenever the disease has broken out in any particular part, I have removed animals to another part, and have at once set about removing the chain of communication. Again, when I have found any thing like a cough, I have taken blood from the animal—a snialler or a larger quantity, according to the circumstances of the case. I think you may all judge, as you go round to visit your stock, whether there is any thing wrong as regards their coats. Perhaps it may be well, under the circumstances, to administer something of a stimulating character. Perhaps either would be beneficial; but I do think that there is very little distinction, in this respect, between the ox and the horse, the same remedy being, in fact, applicable to both. I have certainly seen cases in which counter-irritants have been applied with much benefit, that after a time the animal has returned to his companions as well as he was before being attacked. I do not think that every animal attacked is to be looked upon as lost. It is not to be supposed that, if medical aid be resorted to, the animal has no chance of recovering.

Mr. GABRIEL.—Bad atmosphere, a predisposition on the part of the animal, and other causes, have been assigned as producing disease; but I am disposed to think that the principal cause is the want of proper care and attention on the part of the cattle proprietor. Until you get cattle proprietors to be cattle men, in the same way as the owners of horses are horsemen, you will not find that attention paid to them which they deserve. If a proprietor saw his favourite hunter ailing, he would not proceed in the same manner as the cattle-dealer does. If his horse gave but a single cough, what would he do? Why, he would alter the temperature; he would throw an extra rug over the horse's quarters, and bandage his legs; he would make an entire change of diet (I am not now speaking of the medical man, but of the owner of horses),

and give him a better description of food. By this means, and by the application of popular remedies which are resorted to in the stable, things incident to the disease are got rid of which might otherwise have led to fatal results. Nothing of this kind, however, is usually done in the case of cattle: the utmost which is thought of, when an animal is discovered to be diseased, is to put him under proper shelter, and possibly to give him a drench; he is then left to take his chance. It is never ascertained whether or not the required effect has been produced—whether the seeds imperceptibly sown have been got rid of, or are leading to their ultimate results. In the stable the animal is not put to his usual occupation until every symptom of disease has been eradicated; and if we take the treatment of the horse on the one hand, when labouring under incipient disease, and the case of cattle on the other, when that disease has actually commenced, can we feel surprised at the one being kept in a state of comparative health, while the other suffers to such an extent?

Mr. ELLMAN feared that the veterinary art had not reached that eminence which would justify the expectation of relief. He had called in professional aid with regard to sheep, but had found more benefit from taking the advice of his shepherd. No animal is so inflammatory as the sheep, and none is less tenacious of life. We ought altogether to pin our faith to science, disregarding the practical man, the herdsman, or the shepherd. Such persons have seen more of animals than we have done, and they have paid close attention to diseases whenever they have come under their hands. Although science may in a great measure assist us, if we were entirely to abide by what we hear from scientific men, we should certainly be led into errors.

The CHAIRMAN.—The practical man, above all others, in every department of life, from the highest to the lowest, is the man for whom, in his own peculiar vocation, I entertain the greatest degree of respect. But if I am speaking of the treatment of disease in an animal, I can no more call the shepherd a practical man than I can, in the same sense, call the nurse practical who attends the patient on the sick bed. In my opinion, the practical man is the man who, having devoted his time and talents to the investigation of the nature, character, and treatment of disease, has, in the exercise of his profession, become practical through the experience which he has obtained. I do trust—and I am quite sure that neither my friend Mr. Cherry nor my friend Mr. Turner will think that I would utter a syllable with the intention of detracting from the merits of their profession—but I do trust that the time will come when that blot upon their profession, in respect to their want of knowledge in the treatment of the diseases of sheep and

cattle, will be removed. I know perfectly well that the disease more particularly under consideration is of a peculiar character; and I feel strongly, and every day more and more so, that there are circumstances connected with the treatment of cattle which throw immense difficulties in the way.

Mr. CHERRY: There was one observation of Mr. Ellman's which, I must say, I was very sorry to hear: I refer to that in which he placed shepherds and herdsmen above those who have gone through the labour of investigating this disease. Mr. Shaw has complained that this matter is not taken up more by those who belong to the veterinary profession. I, for one, took it up many years ago. There were no means existing for my education in it. There were many others belonging to the veterinary profession who had devoted their time to the investigation and treatment of cattle diseases, and on whose judgment and skill every reliance could be placed. Mr. Cartwright, of Whitchurch, Salop, had taken great pains to elucidate the important subject of parturition. The whole labour and expense attendant on the pursuit of this important branch had fallen, until very lately, entirely on individuals. It is my conviction, that one animal out of three that dies is killed by mal-practice; and I must protest against shepherds and herdsmen being employed to do that which is beyond the routine of their ordinary duties. By their interference at lambing-time, for example, I am convinced they often do a great deal of harm.

Mr. HOBBS said—I quite agree with Mr. Ellman in his remarks respecting veterinary assistance. In the case of horses, the gentlemen of that profession understand what they are called upon to do; but in the case of cattle, it is not uncommon to call in a veterinary surgeon, and incur an expense of nine or ten pounds, when, after all, the animal is obliged at last to be slaughtered. It must be admitted that persons engaged in the veterinary art have not paid so much attention to the diseases of cattle as to those of horses. I trust that this difference will not continue. Those young men who are now being educated need not fear that there will be any deficiency of employment if they combine practice with science. In numbers of cases hitherto, the experiments tried have been unsuccessful for want of such combination.—I now feel great pleasure in proposing a vote of thanks to Mr. Cherry for his excellent lecture.

Mr. POCKOCK seconded the motion, which was carried unanimously.

Mr. CHERRY briefly returned thanks.

Abridged from "The Mark-lane Express."

INDEX.

- Abscess in the brain, case of, 543
 Abstract of the Charter applied for, for the Veterinary Schools, 117
 _____ reply of the Council to, 122
 Adhesions of the intestines, case of, 365
 Affairs, state of at the Royal Veterinary College, 195
 Agricultural Society, Royal, of England, 28
 _____ the Duke of Richmond compliments Mr. Simonds on
 his Lecture at, 28
 _____ Professor Sewell's silly speech at, 29
 _____ Mr. Shaw's remarks on the above, 30
 _____ Editor of Mark Lane Express comments on, 31
 _____ Mr. Henderson's letter on Professor Sewell's speech,
 32
 _____ Royal, of England, observations at on shoeing horses,
 343
 _____ progress of, 445
 Agriculture, the progress of, 445
 _____ Professor Johnston's lecture on the application of science to,
 573
 Aitchison, his case of unnatural presentation in a cow, 316
 Amber, rectified oil of, a vermifuge, 604
 American, South, horses, 618
 Anderson *v.* Blackburn, 469
 Animals, application of chloroform to, 3
 _____ prevention of cruelty to, 452
 _____ effects of chloroform on, 637
 Annual general meeting, the fourth, of the Royal College of Veterinary Sur-
 geons, 297
 _____ members present at, 352
 _____ result of election at, for six members of council, 353
 _____ Report, the fourth, of the Council of the Royal College of Veterinary
 Surgeons, 300
 Anti-humbug, or Marshall's specific for diseases of the eye, 426
 Aosalada anagetinonimome (an ostler's account), 656
 Appeal to the veterinary profession on the approach of their general meet-
 ing, 225
 Apoplexy, parturient, case of, 193
 Arkcoll, his cases of death from drenching, 378
 Aston, T., his account (derived from a friend) of South American horses,
 618
 Axillary vein, rupture of, 192
 Baboons, an encounter with, 356
 Baker, Samuel, his opinions on megrims, 680
 Barlow, John, his remarks on shoulder lameness, 509
 Baudius, his case of esophagotomy in a cow, 569
 Biting a young horse, 236
 Blinds, improved, on the sliding principle, 537
 Blood of the dog, verminous alterations in, 67
 Boards, veterinary, of examination, 207, 265

- Brady, P., his successful treatment of Asiatic cholera (in man) by chloroform given internally, 519
- Brain, tumour in, and death from it, in a horse, 16
- certain abnormal formations found in the, in an aged pony, 18
- case of abscess in, 543
- Breeding horses, Mr. Godwin's observations on, 126
- Broad, James, his cure of glanders in the horse, 142
- his case of hock lameness and fracture of the tibia, 371
- his opinions on the causation of megrims, 609
- Broderick, John, sends for publication Mr. Dawson's novel method of castration, 607
- Bronchotomy breathing tubes, examined, 442
- Burnett, Sir Wm., his deodorizing and disinfecting fluid, 453
- Bursæ mucosæ, and synovial sheaths, diseases of, 597
- Business, nat'ral, taking to, 356
- By-laws, the question of submitting them to the decision of the Secretary of State, considered by the Editor, 589
- Cailler, M., his extraordinary case of gestation in a mare, 216
- Caoutchouc, 407
- Carpitis, A. Cherry's explanation of the appellation for "spavin in the knee," 512
- Cartilages, ossification of, lameness arising from, remediable by neurotomy, 63
- Cartwright, W. A., his three cases of disease in sows, to wit, inverted uterus, 8; spinal disease, 9; spinal affection and disease of the stifle joints, 11
- his case of protrusion of the rectum in a two-year-old colt, 561
- his case of exomphalus caused by ligature, 563
- his account of medicines that act on the uterus, 373
- his case of intussusception in a foal, 376
- his case of the retention of the fœtus in a cow—of band or ligament across the vagina at the mouth of the os uteri—and of pleuro pneumonia, 494
- his case of false labour pains in a heifer, 496
- his extraction of two lambs, heads presenting, 496
- his extraction of a dead lamb with Nelson's forceps, 497
- Castration, a novel method of (by scraping the spermatic cord), 607
- of milch cows, 392
- hobbles for, improved, 537, 635
- Cattle show, Editor's remarks on that for 1847, 41
- foreign, inspection of such as are imported, 56
- choking in, 72-75
- epidemic, cases of, 83
- the murrain among, 112
- French, 595
- red-water in, 405
- importation of, 450
- editorial remarks on, 471
- epidemic, the, letter on to the members of the Royal Agricultural Society, 498
- diseased, observations on the importation of, 530
- importation of foreign, 677
- Central Society of Veterinary Medicine of France, report of meetings of, 211, 281
- Compte-Rendu of, for 1847, 340

- Charlier, M. P., his account of the castration of the cow, 392
- Changes in the nature and character of diseases in horses, 541
- Charter, abstract of the, applied for, for the veterinary schools, 117
- reply of the Council to, 122
- for the veterinary schools, editorial remarks on, 169
- important question touching, discussed, 533
- Editorial remarks on, 532
- Cherry, Arthur, his account of spurious veterinary boards of examination, 207
- his lecture on pleuro-pneumonia, 690
- his further remarks on registration, 615
- his account of the mock veterinary examinations that took place at Edinburgh, 284
- his reply to Mr. Whittle, 317
- his account of registration, 382
- on carpitis—registration—uncertificated practitioners, 512
- Chiffney bits and bridle reins, 236
- Chloride of zinc for deodorizing and disinfecting, 453
- Chloroform, effects of, on the horse, 1
- application of, to animals, 3
- the history of its introduction, 105
- Mr. Field's account of the effects of the inhalation of, on horses, 134
- the operation of castration under the influence of, 137
- Mr. Peech's account of the effects of the inhalation of, on horses, 146
- may it not prove useful in the slaughter-house? 202
- administered to a pig, 233
- and ether, Mayhew, Edw., on the action of, on animals, 484
- given internally to a man suffering from Asiatic cholera, 519
- editorial remarks on the internal use of, 531
- physiological action of, 596
- effects of, on animals, 637
- Choking in cattle, 72-75
- Cholera, Asiatic (in man), successfully treated by chloroform, 519
- Clark v. Freeman, rights of physicians, 288
- Clavelisation of flocks of sheep viewed as a measure of sanitary police, 464, 522, 568
- Colic, observations on, from indigestion, illustrated by an extraordinary case of impactment of the stomach and colon, 623
- Colicky complaints, a few remarks on, 620
- College, Royal Veterinary, state of affairs at, 195
- Coma in the horse, 322
- Complaint of a veterinary pupil respecting his admission for examination, 209
- Compte-Rendu of the Central Society of Veterinary Medicine of France for 1847, 340
- Conception of a mule, 87
- Contagious and infectious disorders in cattle, 595
- Constipation, obstinate and dangerous, with symptoms simulating "gripes," unrelieved by ether, opium, aloes, tobacco, and chloroform; at length apparently removed by calomel and opium, 552
- Contracted hoofs, lameness from, curable by neurotomy, 64
- Contributions to zoological pathology, 67
- Cooper, Mr. Bransby, 96

- Council of the R.C.V.S., proceedings of, sitting December 29, 1847, 116
 _____ February 9th, 1848, 177
 _____ March 8th, 233
 _____ March 29th, 290
 _____ April 19th, 292
 _____ May 23, 351
 _____ June 28, 474
 _____ August 25th, 533
 _____ at the adjourned special meet-
 ing, 28th August, 594
 _____ at the quarterly meeting, 6th
 October, 655
 _____ result of election of six new members of, 353
 _____ their memorial in reply to unfounded attacks upon the charter of
 the profession, 237
 Cow, esophagotomy on, 569
 _____ rupture of the diaphragm in a, 571
 _____ unnatural presentation in, 316
 Cows, milch, castration of, 392
 Cow, case of retention of the fœtus in, 494
 Cox, W., his cases of prolapsus of the bladder and purpura hemorrhagica, 613
 _____ his account of diarrhœa among cattle, 377
 _____ on the danger of giving drenches, 510
 Creasote, effectual in curing two cases of pseudo-glanders, 17
 Crest of the Royal College of Veterinary Surgeons, review of, 230
 Cruelty to animals, prevention of, 452
 Cuming, W., his north country prescription, 674
 Curious case of incurable disease and lameness from hydatids, 674
 Cut straw litter, 53
 Dawson, E. B., his novel method of castration, 607
 Defects in veterinary education, 85, 149
 Delafond and Gruby, on the verminous alterations in the blood of the dog, 67
 Delafond, O., his account of sheep-pox viewed as a measure of sanitary
 police, 385, 464, 522, 568
 Deodorization and disinfection by Sir H. Burnett's disinfecting fluid—the
 solution of chloride of zinc, 453
 Diaphragm, rupture of, with the introduction of part of the reticulum into
 the thorax, in a cow, 571
 Diarrhœa among cattle, 377
 Diplomas, gentlemen who have obtained them during 1848, 353
 Diseases arising from improper food, 224
 _____ in horses, changes in the nature and character of, 541
 Disinfectants and the rival professors, 582
 Documents, editorial remarks in commendation of those published by the
 Veterinary Council, 286
 Dogs, three cases of suspected poisoning in, 22
 _____ wild, chace of, 234
 Dog, blood of, verminous alterations in, 67
 Draper, H. his cases of quittor, ruptured vein, and parturient apoplexy, 188
 _____ his letters on the subject of pleuro-pneumonia in cattle, 205
 Drenching, cases of death from, 378
 Drenches, danger of giving, 510
 Dumb creation, a word to, 354
 Duncan, John, his "Travels in Western Africa" reviewed, 44

- Editorial remarks on the rise and age of *THE VETERINARIAN*, 40
 ————— on the Cattle Show, 41
 ————— on the charter for the veterinary schools, and on the reply
 of the Council to the same, 169
 ————— on Mr. Walton Mayer's address, 229
 ————— on the registration business, 348
 ————— on Messrs. Leach and Hawthorn's cases, 350-1
 ————— on Mr. Broad's case of fracture, 414
 ————— on the importation of cattle, 471
 ————— on the internal use of chloroform, 531
 ————— on Mr. Broad's case of "hock lameness and fracture of the
 tibia," 592
 ————— on the ejection of our reporter from the Royal Veterinary
 College by Professor Sewell, 652
 ————— on Mr. Gowing's case of "fracture of the cartilage of
 the foot," 593
 ————— appeal to the profession on the approach of their general meeting,
 225
 ————— congratulatory address on Mr. Mayhew's resuscitation, 228
 ————— commendation of the public documents set forth by the Council of
 the R. C. V. S., 286
 ————— congratulation to the pupils on the suspension of the apprentice-
 ship and four-session clauses in the by-laws, 287
 ————— observations on the annual general meeting for 1848, 346
 ————— few words to unrecognised veterinary practitioners, 349
 ————— examination of the momentous question coming from the Secre-
 tary of State to the Council, touching the reference to him of the by-
 laws, 589
 Editor, trying and responsible duties of, 54
 Education, veterinary, 6, 151
 ————— veterinary defective, 85
 ————— veterinary, and practice in France, 639
 Elbow joint lameness, 312
 ————— post mortem, account of, 315
 Entozoa, causing lameness of an unusual kind and poll-evil, 3
 Epidemic, the cattle, 83
 ————— cattle, address to the Royal Agricultural Society on, 498
 Epidemics, observations on the appearance and prevention of, 530
 Ernes, W., his new instrument for neurotomy, 251
 ————— his observations on the importation of diseased cattle, and the
 appearance and prevention of epidemics, 530
 Esophagotomy on a cow, 569
 "Essays on the Diseases of the Jaws, and their Treatment, by Leonard
 Koecker," review of, 114
 Ether, fumigation with, effectual in the cure of tetanus, 91
 ————— and chloroform, Mayhew, on the action of, 484
 ————— a vermifuge, 604
 Examination, veterinary, boards of, 207, 265
 ————— spurious, an account of such at Edinburgh, 284
 Examiners, board of, diplomas granted by during 1848, 353
 Exercise, on the influence of, on man and animals, 37—duration of exercise,
 37—of climate, 38—influence of the seasons, of temperature, and of soil
 on exercise, 39
 ————— influence of on man and animals, 90, 149
 Exomphalus cured by ligature, 563
 Extraction of two lambs, heads presenting, 496

- Extraordinary fact, lambs left damless suckled by a bitch, 56
 Eye, Marshall's specific for diseases of in the horse, 426
 Fact, extraordinary, lambs left damless suckled by a bitch, 56
 Farmers' Club, Mr. Arthur Cherry's lecture at, 690
 ——— a hint to, 656
 Farriery, rural, 176
 Femur, fracture of the neck of, 611
 Field, Wm., his account of the effects of chloroform on horses, 134
 Filaria in the bronchial passages of calves destroyed through nasal inhalation, 604
 Finance Report of the Royal College of Veterinary Surgeons for the collegiate years 1847-8, 308
 Food, improper, diseases arising from, 224
 Forceps, Nelson's parturition, reported on, 443
 ——— extraction of a dead lamb with, 497
 Foreign cattle, necessary inspection of such as are imported, 56
 Formations, certain abnormal found within the brain of an aged pony, 18
 Fowl, the domestic, 51
 Fox, an old, dressed à-la-mode de chevreuil de compiegne, 175
 Fracture, Mr. Broad's case of, editorial remarks on, 414
 ——— of the cartilage of the foot, 549
 Fractured limbs of horses, the long retention of the bones in their places, 499, 501, 527
 French revolution productive of veterinary reform, 564
 Galvanism, extraordinary effects of on an animal, 408
 Gavin, Wm., his observations on lameness in horses, 605
 ——— his few remarks on colicky complaints, 620
 Genital and general visceral disease in a young sow, 673
 Gestation, extraordinary, in a mare, curious case of, 216
 Glanders, the cure of in the horse, 142
 ——— examination of the nasal secretion in, 476
 Gloag, J. H., his account of improved blinds and hobbles, 537
 ——— his case of abscess in the brain, 543
 ——— his account of the improved castration hobbles, 635
 ——— his case of influenza followed by rheumatism, 667
 Godwin, H. J., his observations on the decline of our stock of good horses, on breeding, and on Queen's Plates and racing, 126
 Goodwin, Wm., his remarks on Queen's Plates, 81
 ——— an intestinal tumour sent by him for examination, 384
 Gowing, T. H., his new instrument for neurotomy, 252
 ——— his account of fracture of the cartilage of the foot, 549
 Grainger, R. D., his Hunterian oration for 1848, 218
 Green, Joseph, his evidence on medical legislation, 99
 "Gripes," symptoms simulating, from obstinate and dangerous constipation, unrelieved by ether, opium, aloes, tobacco, and chloroform, at length apparently removed by calomel and opium, 552
 Gruby and Delafond on the verminous alterations in the blood of the dog, 67
 Gutta percha, 407
 Halter reins, spring boxes for, review of, 412
 ——— rope, patent metallic, examined, 441
 Hawthorn, John, his case of ruptured mesentery and strangulated intestine, 320
 Haycock, W., his account of certain abnormal formations found within the brain of an aged pony, 18
 ——— his remarks on the above case, 20
 Heads presenting, extraction of two lambs with, 496

INDEX.

- Heart, hypertrophy with dilatation of, 12
 ——— of a cow, strange appearance of from pericarditis, 433
 Heifer, case of false labour pains in, 496
 Henderson, A., his letter on Professor Sewell's silly speech at the Royal Agricultural Society, 32
 ——— his representation of the defects in veterinary education, 85, 149
 ——— remarks on his letters, 114
 Hildach, his case of rupture of the diaphragm, with introduction of part of the reticulum into the thorax, in a cow, 571
 Hint, a, to farmers, 656
 Hip-joint or round bone lameness, 310
 Hobbles for castration, improved, 537
 Hock lameness and fracture of the tibia, case of, 371
 Hodgson, J. T., his account of the importation of foreign cattle, 677
 Hoofs, contracted, lameness from, curable by neurotomy, 64
 Hope, Dr., the late, narrative of this highly gifted man, 55
 Hopples for castration, improved, 635
 Horses, South American, 618
 Horse, effects of chloroform on, 1
 Huzard, his catalogue of veterinary works of all languages, published up to the year 1838, 214
 Hydatids, curious case of disease and lameness from, 674
 Imperforate vagina in a heifer, 141
 Importation of diseased sheep, 448
 ——— remarks on in the House of Commons, 448
 ——— ditto in the House of Lords, 449
 Importation of cattle, 450
 ——— of diseased cattle, some few observations on, 530
 ——— of foreign cattle, 677
 Imported cattle, veterinary surgeons the only fit examiners of, 511
 Influence of exercise on man and animals, 90
 Influenza, followed by rheumatism, 667
 Inoculation for small-pox (clavelisation), viewed as a measure of sanitary police, 464
 Intestine strangulated, and ruptured mesentery, 320
 ——— case of adhesion of, 365
 Intus-susception in a foal three weeks old, case of, 376
 Inversio uteri in the sow, 8
 Inventions, new, in the years 1846-7, 441
 Johnston, Professor, extracts from his lecture on the application of science to agriculture, 573
 Jones, T., his remarks on registration and uncertificated practitioners, 545
 Jones *v.* Chew, 26
 Juices, the motion of, in the animal body, 404
 Jurisprudence, veterinary, *Smart v. Alison*, 24
 ——— *Jones v. Chew*, 26
 ——— *Nicholson v. Tweedy*, 685
 ——— Action for libel, *Mayhew v. Spooner*, 164
 ——— *Shaw v. the York and North Midland Railway Company to recover for injuries to a horse*, 288
 ——— *Madders v. Moss*, 408
 ——— *Anderson v. Blackburn*, 469
 ——— *Anderson v. Robson*, 584
 ——— medical, rights of physicians, *Clark v. Freeman*, 288
 Kidney, diseased, and stomach ruptured, in a horse, 602

INDEX.

- three, or paralytic affection in horses, 402
- labour pains, case of false, in a heifer, 496
- limbs, diseases of the heart, liver, brain, and intestines in, 368
- — extraction of two, heads presenting, 496
- Lamb, extraction of a dead one with Nelson's forceps, 497
- Lameness of an unusual kind and poll-evil caused by entozoa, 3
- — — incurable by medicinal means, remediable through neurotomy, 62
- — — in horses, observations on, 605
- Lamenesses, other joint, 309
- Leach, P., his case of coma in the horse, 322
- Lebel, M., his observations on inoculation for sheep-pox with preserved virus, 34
- Leblanc, U., his account of Huzard's catalogue of veterinary works in all languages published up to the year 1838, 214
- Lecture, introductory, Professor Sewell's refusal to admit a reporter to be present at, 636
- Liebig, his account of the motion of the juices in animals, 404
- Limbs in horses, cases of fracture of, and retention *in situ*, 499, 501
- Lion's, a, meal, 354
- Liston, sympathy on the death of, 44
- Litter, cut straw, 53
- Live stock in the United Kingdom, 175
- Madders *v.* Moss, 408
- Man, a, who can make himself taller at will, 416
- Mare, extraordinary case of gestation in, 216
- Marshall's specific for diseases of the eye of the horse, 426
- Mayer, T. W., to Mr. Percivall, on the discovery of neurotomy, 69
- — — his "Few Remarks on Pleuro-pneumonia," addressed to the Agriculturists of Great Britain, 184
- Mayer, Thos., senior, obituary of, 653
- Mayhew *v.* Spooner, action for libel, 154
- Mayhew, Edw., his account of affairs at the Royal Veterinary College, 195
- — — his observations touching points in regard to the veterinary profession, 258
- — — on the action of ether and chloroform in animals, 484
- — — his comparative pathology elucidated by injection of cold water into the uterus, 554
- — — remarks on Professor Sewell's refusal to admit a reporter to his introductory lecture, 681
- — — his observations on colic from indigestion, illustrated by an extraordinary case of impactment of stomach and colon, 623
- Mechi, Mr., his lecture on breeding, feeding, and rearing, 581
- Medals to medical officers, 166
- Medical officer, on the utility of chloroform in the slaughter-house, 202
- — — legislation, Mr. Jos. Green's evidence on, 99
- Meetings, professional, notice of, 170
- Meeting, Annual General, the fourth of the Royal College of Veterinary Surgeons, 297
- — — at York of the Royal Agricultural Society, 444
- Megrims, cause of, 609
- — — Mr. Baker's opinions on the nature of, 680
- Members present at the General Meeting, 352
- Memorial of the Council of the R.C.V.S. to Sir Geo. Grey, Bart., Principal Secretary of State for the Home Department, in reply to unfounded attacks upon their Charter, 237
- Mercer, Dr., his contributions to zoological pathology, 67

INDEX.

- Mesentery, rupture of, and strangulation of intestine, 320
- Milk, 222
- Miscellanea : a man who can make himself taller at will, 416
- _____ a word to the dumb creation, 354
 - _____ a lion's meal, 354
 - _____ an encounter with baboons near the Kwees river, 355
 - _____ taking to business nat'ral, 356
 - _____ restive horses, 296
 - _____ chloroform administered to a pig, 233
 - _____ the rhinoceros, 234
 - _____ wild dog chase, 234
 - _____ putting a young horse on the bit, 236
 - _____ Chiffney bits and bridle reins, 236
 - _____ live stock in the United Kingdom, 175
 - _____ how to manage shy horses, 176
 - _____ good riding, 176
 - _____ rural farriery, 176
 - _____ moral character of the monkey, 51
 - _____ the domestic fowl, 51
 - _____ cut straw litter, 52
 - _____ the wolves in Tyrone, 53
 - _____ editors, 54
 - _____ the late Dr. Hope, 55
 - _____ foreign cattle, 55
 - _____ extraordinary fact, 56
 - _____ medal to the Duke of Richmond, 56
- Monkey, moral character of, 51
- Moorcroft, his Travels reviewed, 273, 326
- Morton, W. J. T., review of his "Manual of Pharmacy for the Veterinary Student," 152
- Motion, the, of the juices in an animal body, 404
- Mule, conception of, 87
- Murray, the, among cattle, 112
- Nasal secretion, examination of, in glanders, 476
- Nervous matter, regeneration of, 254
- Neurotomy, success of, 57
- _____ insuccess of, 58
 - _____ to command success in three considerations requisite, 58
 - _____ election of the subject for, 60
 - _____ the incurably lame horse the especial subject for, 61
 - _____ the horse lame from laminitis unfit for, 62
 - _____ in ossification of the cartilages, 63
 - _____ for ringbone, 63
 - _____ for contracted hoofs, 64
 - _____ has other objects besides the cure of lameness, 66
 - _____ traumatic tetanus arrested by, 66
 - _____ T. H. Mayer's letter to W. Percivall on the discovery of, 69
 - _____ steps for the operation, 177
 - _____ course of the nerves in regard to, 178-9
 - _____ the operation for, 180
 - _____ the high operation for, 183
 - _____ improvements in, 250
 - _____ subcutaneous, 251
 - _____ Mr. Ernes' new instrument for, 251
 - _____ Mr. Gowing's new instrument for, 252
 - _____ union of the nerves divided in, 253

INDEX.

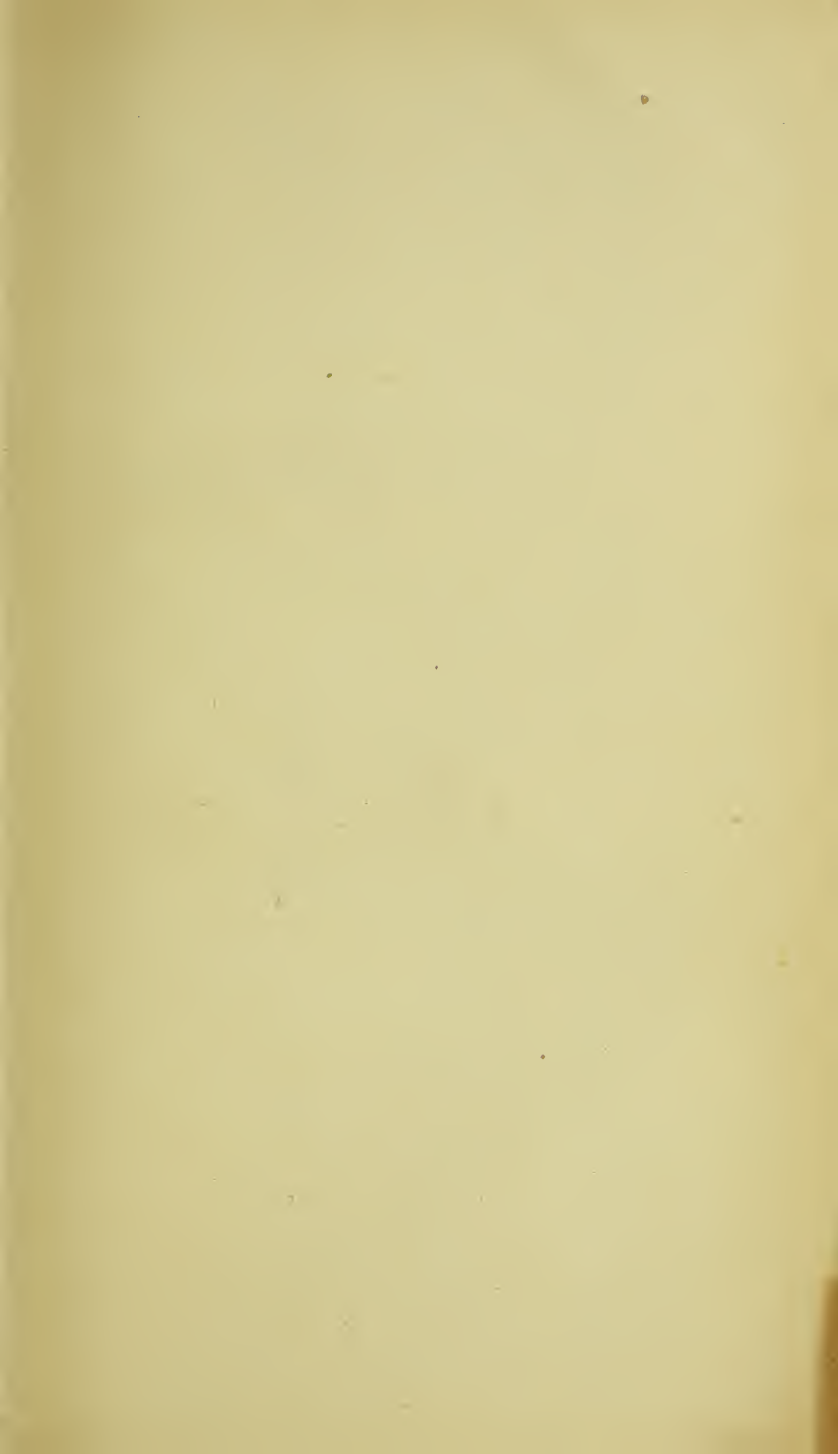
- neurotomy, regeneration of nerves in, 254
- confined to one leg, 256
- sequelæ of, 256
- another class of evils arising out of, 257
- return of sensation in the re-united and regenerated nerves, 255
- cases of, recommending *transverse* division of the nerve, 268
- transverse operation of, further explained, 322
- Neurotomized horse, is he to be regarded as sound? 257
- Nelson, John, his cases of choking in cattle, 72
- continuous cases of, 74
- his case of protrusion of the rectum in pigs, 380
- his parturition forceps reported on, 443
- his cases of the fractured limbs of horses, 501, 547
- Notice of professional meetings, 170
- Obituary of Mr. Mayer, senior, of Newcastle, 653
- Observations on the causes of decline in our stock of good horses, on breeding, and on Queen's plates, and racing, 126
- Officers, medical, medals to, 166
- Oration, the Hunterian, for 1848, 218
- Ostler's account, an, 656
- Ox, rupture of the urethra of an, 204
- Paralytic affections in horses (kumree), an account of, 402
- Parturition, difficult, in a cow, case of, 139
- bitch, case of, 140
- protracted, in a sheep, case of, 429
- comparative, elucidated by injection of cold water into the uterus, 554
- Pathology, zoological, contributions to, 67
- Percivall, Wm. on neurotomy, 57, 177
- on other joint lamenesses, 309
- on hip joint or round bone lameness, 310
- on elbow-joint lameness, 312
- on splint, 417
- on ringbone, 477
- his case of obstinate and dangerous constipation, with symptoms simulating "gripes," unrelieved by ether, opium, aloes, tobacco, and chloroform; at length apparently relieved by calomel and opium, 552
- on diseases of the bursæ mucosæ and synovial sheaths, 597
- on windgalls, 598, 657
- his case of pleurisy ending in rheumatic lameness, and hypertrophy with dilatation of the heart, 12
- on shoulder lameness, 357
- Pericarditis in a cow, supervening on difficult and protracted parturition, case of, with strange appearance of the heart, 432
- Pickering, J. C., his operation of castration under the influence of chloroform, 137
- his account of the use of lime in opened joint, 138
- his case of imperforate vagina in a heifer, 141
- ditto of difficult parturition in a cow, 139
- bitch, 140
- Pigs, protrusion of the rectum in, 380
- Pleurisy, case of, ending in rheumatic inflammation and hypertrophy, with dilatation of the heart, 12
- Pleuro-pneumonia in cattle, a few remarks on, 184
- Mr. Arthur Cherry's lecture on, 690
- letters on the subject of, 205

- Pleuro-pneumonia, Cartwright's case of, 494
 Pneumonia in horses, 341
 Poisoning, three cases of suspected, in dogs, 22
 Poll-evil and lameness of an unusual kind caused by entozoa, 3
 Practice, veterinary, and education in France, 639
 Practitioners, uncertificated, 513
 _____ remarks on, 545
 Prescription, north country, 674
 Presentation, false, with difficult parturition in a heifer, 270
 _____ unnatural, in a cow, case of, 316
 Prevention of cruelty to animals, 452
 Proceedings of the Council of the R.C.V.S. sitting of February 9th, 1848, 171
 _____ sitting March 29th, 290
 _____ sitting April 19th, 292
 _____ sitting May 23d, 351
 _____ sitting 28th June, 474
 _____ sitting 25th August, 533
 _____ sitting 28th August, 594
 _____ sitting 6th October, 655
 Profession, veterinary, appeal to, on the approaching general meeting, 225
 _____ Mr. Mayhew's observations on various points in regard
 to, 258
 _____ Mr. Wright's letter on, 263
 Professors, the rival, and disinfectants, 582
 Prolapsus of the bladder, and purpura hemorrhagica, 613
 Protrusion of the rectum in a two-year old colt, 561
 Pseudo-glanders, two cases of, cured by kreasote, 17
 Pupil, veterinary, his complaint respecting his admission for examination, 209
 Purpura hemorrhagica, 615
 Queen's plates, Mr. Goodwin's remarks on, 81
 _____ Mr. Godwin's observations on, 126
 Quittor, cured by dilatation, 189
 Racing, Mr. Godwin's observations on, 126
 Read, Robert, his method of treating sandcrack, 666
 _____ his case of rupture of the urethra in an ox, 204
 R. B. P., on the publications of the registries of veterinary surgeons, 431
 Rectum, protrusion of in pigs, 380
 _____ protrusion of in a two-year old colt, 561
 Red-water in cattle, 405
 Registration, 382, 513
 _____ committee, third report of, 294
 _____ remarks on, and uncertificated practitioners, 545
 _____ further remarks on, 615
 Registries of veterinary surgeons, publication of, 431
 Reply of the Council to the charter applied for, for the veterinary schools, 122
 Report, annual, the fourth of the Council of the Royal College of Veterinary
 Surgeons, 300
 _____ finance, of the Royal College of Veterinary Surgeons for the col-
 legiate year 1847-8, 308
 Reporter for the press, the refusal of Professor Sewell to admit of one being
 present at his introductory lecture, 636
 Restive horses, 296
 Review of "An Essay on the Diseases of the Jaws, and their Treatment," by
 Leonard Koecker, 114

- Review of "The Pocket and the Stud; or practical hints on the management of the stable," by Harry Hieover, 642
- of "Horses; their varieties, breeding, and management in health and disease," by W. D. Richardson, 585
- of the crest of the Royal College of Veterinary Surgeons, 230
- of "A practical Treatise on Variola Ovina or Small-pox in Sheep," by James B. Simonds, lecturer on cattle pathology, &c, 434
- of "Travels in Western Africa in 1845-6," by John Duncan, 44
- of Moorcroft's "Travels in the Himalayan Provinces of Hindostan," &c. 273, 326
- of "A Manual of Pharmacy for the Student of Veterinary Medicine," by W. J. T. Morton, 152
- of spongio-piline as a veterinary surgical remedy, 338
- of spring boxes for halter reins, 412
- Revolution, French, productive of (French) veterinary reform, 564
- Rheumatic lameness following pleurisy, and succeeded by hypertrophy with dilatation of the heart, 12
- Rheumatism consequent on influenza, 667
- Rhinoceros, the, 234
- Richmond, Duke of, medal sent to by the Emperor of Russia, 56
- his complimentary speech on Mr. Simonds' lecture at the Royal Agricultural Society, 28
- Riding, good, 176
- Rights of Physicians, *Clark v. Freeman*, 288
- Ringbone, lameness from, curable by neurotomy, 63
- W. Percivall on, 477
- Round bone or hip joint lameness, 310
- Sandrack, a new method of treating, 666
- Scott, John, his case of tumour on the hind leg in a yearling filly, 378
- Sensation, return of, in divided nerves, 255
- Sequelæ of neurotomy, 256-7
- Sewell, Professor, his silly speech at the Royal Agricultural Society, 29
- Mr. Shaw's remarks on, 30
- the editor of the *Mark Lane Express*' comments on the same, 31
- Mr. Henderson's letter on the same, 32
- his refusal to admit a reporter to be present at his introductory lecture, 636
- his ejection from the Veterinary College of the reporter, editorial remarks on, 652
- subsequent remarks thereon, by Mr. Mayhew, 681
- Shaw *v.* the York and North Midland Railway Company, for the recovery for injuries to a horse, 288
- Sheep-pox, some observations on the preservation of the virus of, and on inoculation with, 34
- inoculation for, viewed as a measure of sanitary police, 285
- Sheep, case of protracted parturition in, 429
- diseased, importation of, 448
- remarks on, in the House of Commons, 448
- ditto, in the House of Lords, 449
- small-pox in, 451
- Shoeing horses, observations on, at the Royal Agricultural Society, 343
- Shoulder lameness, remarks on, 357, 507
- Shy horses, how to manage, 176

- Simmons, John S., his case of pericarditis in a cow attended with a strange appearance of the heart, 432
- Simonds, J. B., Professor, his "Practical Treatise on Variola Ovina or Small-pox in Sheep," reviewed, 434
-
- his lecture at the York Meeting of the Royal Agricultural Society, 515
- Small-pox in sheep, 451
- Smart *v.* Alison, 24
- Society, Royal, for the Prevention of Cruelty to Animals, annual meeting, 345
-
- Central, of Veterinary Medicine of France, 211
- Soundness, as respects neurotomy, 257
- South American horses, 618
- Sow, genital and general visceral disease in a young, 673
- Sows, three cases of disease in, 8
- Spinal disease in a sow, 9
-
- with disease of the stifle joints in a young sow, 11
- Splint, W. Percivall on, 417
- Spongio-piline, the probable utility of, 338
- Stabbing with a stable-fork, case of, 77
- Staggers, stomach, successfully treated by ether inhalation, &c. 342
- Stomach ruptured and kidney diseased in a horse, 602
- Stomach-staggers successfully treated by ether inhalation, &c. 342
- Storry, John, his cases of cattle epidemic, 83
- Stratton, Dr., his account of Sir Wm. Burnett's disinfecting fluid, 453
- Strongylus in the nasal passages of calves destroyed through nasal inhalation, 604
- Tendons, wounded and divided, 79
- Tetanus, traumatic, arrested by neurotomy, 66
-
- general idiopathic, cured by ether fumigation, 91
-
- idiopathic, recovery from, through castration, 341
- Teuten, Mr. (our reporter), refusal of Mr. Sewell to admit him to his introductory lecture, 636
- Thiernesse, Professor, his account of the effects of chloroform on animals, 637
- Thigh bone, fracture of the neck of, 611
- Tombs, John, his case of genital and general disease in a young sow, 673
-
- his three cases of suspected poisoning in dogs, 22
-
- his case of adhesion of the intestines, prefaced by some remarks on passing professional events, 365
-
- his extraordinary fact in utero-gestation, 367
-
- his case of diseased kidney and ruptured stomach in a horse, 602
- "Travels in the Himalayan Provinces of Hindostan and the Panjab, in Ladukh, and Kashmir; in Peshawar, Kabul, Kundez, and Bokhara, by Mr. Wm. Moorcroft and Mr. Geo. Trebeck, from 1819 to 1825. Prepared for the press by Horace Wilson." Review of, 273, 326
- Tumour in the brain, and death from it, in a horse, 16
-
- on the hind leg, case of, in a yearling filley, 378
- Turner, Geo., his account of kumree in horses, 402
- Turner, Thos., on wounded and divided tendons, 79
- Turpentine, oil of, a vermifuge, 604
- Tyrone, wolves of, 53
- Urethra, rupture of in an ox, 204
- Utero-gestation, extraordinary fact in, 367
- Uterus, disease of the neck of, some curious observations on, 340
-
- medicines that act on, 373
-
- band or ligament across the mouth of, 494

- Uterus, injection of cold water into, elucidation of comparative pathology, 554
- Vagina, imperforate, in a heifer, 141
- case of band or ligament across the, in a cow, 494
- Variola ovina, *see* sheep-pox, 451
- Venison, an old fox dressed *à la mode* of, 175
- Vermifuge vapours, 604
- Verminous alterations of the blood of the dog, 67
- Veterinarius, his account of the nature and character of diseases in horses, 541
- Veterinary education and practice in France, 639
- surgeons, the only proper examiners of imported cattle, 511
- education, 6
- “VETERINARIAN,” Editor’s observations on the rise and age of, 40
- embarks on the twenty-first year of its course, and commences a THIRD SERIES, 40
- Vincent, J. P., his account of the diseases of the head, liver, brain, and intestines in lambs, 368
- his case of incurable lameness and disease from the presence of hydatids, 674
- his case of lameness of an unusual kind, and poll-evil, caused by entozoa, 3
- Waldie, D., his history of chloroform, 105
- Webb, Mr., his case of tumour in the brain, and death from it, in a horse, 16
- his two cases of pseudo-glanders cured by creasote, 17
- Webb, J. G., his recommendation of the transverse division of the nerves in neurotomy, 268
- his further explanation of transverse neurotomy, 322
- his address on the cattle epidemic to the Royal Agricultural Society, 498
- Whittle, W., his letter on veterinary boards of examination, 265
- Arthur Cherry’s reply to, 317
- Windgall, 598
- pathology of, 658
- rarely productive of lameness, 660
- site of, 660
- species of, 661
- treatment of, 661
- Wolves of Tyrone, 53
- Works relating to veterinary medicine in all languages published up to 1838, 214
- Wright, Thos., his letters on the veterinary profession, 263
- York Meeting of the Royal Agricultural Society, 444
- Professor Johnston’s lecture at, 573
- Professor Simonds’ lecture at, 515
- York Farmers’ Club, lecture delivered at by Mr. Mechi, 581
- Younghusband, John, his case of stabbing with a stable fork, 77
- his case of false presentation and difficult parturition in a heifer, 270
- his case of protracted parturition in the sheep, 429
- on the fractured limbs of horses, 499
- Younghusband, William, his case of fracture of the neck of the thigh bone, 611
- Zinc, chloride of, for deodorizing and disinfecting, 453
- Zoological pathology, contributions to, 67.



UNIVERSITY OF ILLINOIS-URBANA



3 0112 105804733